

ADAPTIVE MANUAL

FOREWORD

The following manual is designed as a guide to the user to gain greater understanding and access to resources that will allow them to come up with ways to adapt their lessons to teach people with the huge variety of abilities - physical, sensory and cognitive, that their students possess.

This manual will give you a very brief introduction to many of the common impairments and also equipment used in adaptive snow sports. It is not exhaustive and can only brush the surface of such a huge field. It is designed to be used alongside the other NZSIA manuals for each discipline, as its job is not to teach you how to teach your discipline but to adapt it to best meet the needs of your student.

This manual is dedicated to the memory of Gillian Hall who gave so much to Adaptive Snowsports in New Zealand.

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Front Cover Photo

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SECTION ONE: INTRODUCTION THE TEACHING MODEL SECTION TWO: ADAPTING PROGRESSIONS SECTION THREE: EQUIPMENT SECTION FOUR: UFTS AND LOADING SECTION FIVE: DISABILITIES



INTRODUCTION

Adaptive snowsports is about adapting teaching and equipment, and providing support for people with a wide range of disabilities to enjoy the freedom of snow sports - at a recreational level or to develop in the sport to their highest potential.

Teaching in the adaptive snowsports arena can be some of the most rewarding lessons your will take. Your clients will challenge you to think outside the square and adapt.

Our aim is to give you the best opportunity to discover how to adapt the skill sets you already have as an instructor, to the many varied and unique teaching suituations you will come across in the adaptive arena.

The core skills of ski or snowboard instruction are the same skills that we use in adaptive instruction. It is understanding how to adapt these for each varied suituation, to draw on past experience, research disabilities and work with the client to achieve the desired outcome.



SECTION ONE: TEACHING THEORY

NZSIA TEACHING MODEL

The teaching model is the foundation of snowsports instruction in New Zealand, providing the framework for an effective lesson.

There are 7 points are:

- 1. Introduction
- 2. Skier/Rider Analysis
- 3. Determining Goals
- 4. Presenting Information
- 5. Guided Practice
- 6. Checking for Understanding
- 7. Summary

In the following parts we will highlight differences and adaptations to this framework to deliver a quality lesson for clients with a range of disabilities.

INTRODUCTION

This is a very important aspect of an adaptive lesson and often happens before the student arrives at the ski area when the student books a lesson. Such information such as impairment, cause, if accidents when it happened, red flags etc need to be ascertained in a courteous and sensitive manner, don't just talk about the disability otherwise people will think you see them as a disability rather than a person.

Remember the individual is the expert on themselves they know what they can do and their limitations.

Talk to a new student and ask about what else they do in daily life. What other sports do they play? What work do they do? While you are getting to know them you are starting to assess them.

The manner in which the student is met and approached is equally important. This must be respectful and appropriate. Talk to the student first not to the care giver if they have one, It is their lesson after all.

Image how you would feel if you had a car accident and needed to use a wheel chair to get around, you turn up to a lesson and your instructor ignores you and talks to the friend who came up with you and then spoke to you like you were stupid.

Ask before you help

Just because someone has a disability, don't assume they need help. Many people with disabilities live fully independent lives. This independence has often been a long hard road to achieve and they may resent you trying to do something for them that they are perfectly capable of doing themselves. Offer assistance only if the person appears to need it. And if they do want help, ask how before you act. On snow this independence will often need to be regained in this new situation and you may need to assist them more as a beginner until they learn the sport and gain the ability to do everything for themselves. People with a high degree of independence may take some time to get used to needing help as a beginner, so patience is needed.

When talking to wheel chair users get down to their level and talk don't make them sit there craning their necks back trying to join in a conversation being conducted above their heads.



Be sensitive about physical contact

Some people depend on their arms for balance, grabbing them even if your intention is to assist could knock them off balance. Avoid patting a person on the head or touching or pushing the wheelchair, scooter or cane. People consider their equipment part of their personal space.

Don't make assumptions

As in all lessons the person themselves will have desires about what they want to achieve from the lesson.

Make sure you ask them the motivations behind taking a lesson and what they hope to achieve. Sometimes as in every lesson people may have unrealistic expectations. They may remember being an expert before the accident and not remember they have problems getting down that beginner slope now.

Motivation may also play a part in deciding which equipment to use. Do they want to stand/sit? Are they interested in doing the sport on a regular basis and becoming competent and independent or do they only intend to do it once and are looking for a bit of fun and not really interested in putting in the hard yards to develop a new sport?

RIDER : SKIER ANALYSIS

This is probably the most crucial part of an adaptive lesson as success depends on you making a detailed assessment of your student's capabilities.

Analysis usually starts when the student books the lesson.

Most adaptive snowsport schools will ask the student to fill out a form or detail what their impairment and capabilities are.

Visual analysis starts when you first meet the student.

It starts with general observations. Do they walk up? Aided? Unaided? Wearing leg braces or a prosthetic? Gait? Alignment of limbs. Are they in a wheel chair, if so what type? How high is the back support? How do they wheel up? Under their own steam? Motorized?

The student's need for special equipment and their mobility will give you clues to the severity of their impairment. Did they open the door without help? When you shake their hand how much strength do they have. Other things worthy of note are if the student is dressed appropriately, emotional state excited, scared, apprehensive etc.

Once you have made your initial analysis during your introduction to gain more information ask them questions to fill in the gaps.

You may already know quite a bit from information they provided before coming to the ski area but the better informed you are the better job you will make of choosing equipment and lesson planning later. Such information as how long has the disability been present and if they have been cleared by a doctor if it is a result of a recent injury. Do they have any secondary disabilities?

CAP

The CAP model can be used as a guideline.

When a person develops they go through different cognitive, affective and physical states and these states we talk about this model a lot when discussing teaching kids but in reality can be used to assess any student.

Think of your timid intermediate middle aged skier they have a very different emotional state than say a retired ski racer of the same age. Someone with one leg has a different physical state than someone with two legs or indeed someone with no legs.



PHYSICAL

Many clues to a client physical ability can present themselves as a student

Muscle Groups

Which muscle groups and body parts the student can or can't use.

In the case of spinal cord injuries asking questions such as where the break is will give you a clue as to the likely muscles they can and can't use.

Each muscle in the body is supplied by a particular level or segment of the spinal cord and by its corresponding spinal nerve. The muscle and its nerve make up a myotome. A knowledge of which muscles are affected at each level of the spine is an advantage. Just because someone says they have a break at a certain level of the spine don't assume they have no function, the break maybe incomplete. It is important to ask if complete or incomplete and which muscles they can use.

Remember the individual is the expert about their body.

Strength

Test the student's strength as this will give you a better idea as to what equipment they are able to use.

Watch to see if they tire easily, a student may walk in but may not be able to stand long enough to ski or ride standing. While testing their strength pay attention to the range of movement they have.

Also note abnormal muscle tone (spasticity or flaccidity, ataxia or athetosis)

Balance

Pay attention to the student's balance and coordination.

Assess the students independence what functions can the student do for themselves? Can they dress, manage the toilet, put their own boots and equipment on, get up by themselves etc.

COMMUNICATION

How does the student communicate, can they speak clearly? Need to write notes? Use sign language? Does the student object to being touched?

SENSORY

If the student has a visual impairment assess the severity, what they can see? Is one eye better than the other? Do they have problems with depth perception? Test the student's field of vision as well as visual acuity. Can the student see some colours better than others? Vision should be tested both inside and outside to assess the effects of bright light and shadows on their vision.

If the student has a hearing impairment assess the severity, do they need to need to use sign language? Need a hearing aid? Does one ear work better than the other?

COGNITIVE

Talk about cognitive development and then highlight how maybe how people born with a developmental issue or people that develop issues later for whatever reason maybe a result of a physical impairment.

During the introduction and physical assessment you will already be starting to gain an insight as to the students cognitive development simply by talking with them.

Throughout the assessment you can evaluate the cognitive ability of the student. Is the function appropriate for chronological age? How well can the student process information? What is their concentration and attention span like?

These are just ways to build a picture of the student's cognitive and physical abilities you still need to ask about previous experience skiing/riding etc.

Was it before after becoming disabled? If the student has skied/ridden before they may use a particular piece of equipment or have a preference which makes the process of fitting them a little more straight forward. Otherwise you need to mutually decide on what equipment if any is to be used based on the capabilities and desires of the student.

You should by now have a pretty good knowledge of your student and be able to negotiate goals for the lesson.



DETERMINING GOALS

Goal setting helps provide motivation for the lesson. It can serve as a road map marking progress and development.

When performance increases, self confidence grows and when self confidence increases so does performance.

Goals need to be thoughtfully developed as setting goals which are too high or unrealistic will only develop frustration.

The principles of goal setting are:

- Goals should be specific
- Goals should be measureable
- Goals should be achievable
- Goals should be time oriented
- Goals should be prioritised
- Goals should be accepted by the participant
- Goals should build on previous strengths
- Goals should be flexible
- Goals should be continually evaluated

Some goals take a long time to achieve and best planned using short term goals as markers of success. In general unless you are working with athletes you don't normally write down goals in a lesson but all the other steps hold true.

The important thing is to set goals which are achievable and realistic; this is where your thorough analysis helps. If possible setting goals that are based on effort rather than outcome help to keep motivation and prevent frustration.

It is important to ask what the students motivations are for taking the lesson as it makes easier to come up with a goal that is accepted by the student. This is especially important with students with cognitive and developmental impairments to keep their focus and attention during the lesson.

Often what people want is an acceptable goal but Just like every lesson you have the potential to run into people that have an unrealistic idea about their skiing and negotiation about goals needs to take place.

PRESENTING INFORMATION

Presentation should be appropriate for your student and their communication ability. Discuss this - they will more often know how best to receive information - it may be an issue they overcome every day.

Consider different options for those with sesnory impairments. For a student with a hearing impairment the use of pencil and paper on the snow or an I Pad may work best. Some students may use a voice box off snow.

For those with developmental or cognitive challenges clear simple communication will be the most effective.

Also just because someone can't see it doesn't mean there aren't ways to create a visual image in the students mind for example using their hand and tilting it to represent different slope angles they are about to encounter.

Obviously everyone that turns up for a lesson will have their own blend of skills, strengths, weaknesses and it is impossible to cover all of the infinite possibilities that may they may present. Try to be imaginative and think of ways to best adapt to give the student the best possible chance for success.

It is important to try to present information in a manner that is most conducive to learning employing as much of the VAK model as appropriate for the student.

CHECKING FOR UNDRSTANDING

Important throughout the lesson, check for understanding.

Keep it Simple (KISS)

SUMMARY

Summarise as with any lesson. Many Adaptive Programmes will keep notes on each client for continuity. Take the time to keep this practice up with clear informative notes and lesson plan.

