COMPETITION
INTRO & ADVANCED
REFERENCE MANUAL

CANADA SNOWBOARD COACHING PROGRAM

coach.ca REACH HIGHER

canada snowboard

National Coaching Certification Program

ABOUT THIS MANUAL

This manual gives you the information you need to complete the Competition Introduction context of the CSCP Pathway. This context is comprised of two levels: Comp Intro. and Comp Intro Advanced. Each level has an on snow workshop, a NCCP multi sport module requirement and a corresponding portfolio and evaluation process. The workshop adheres to the Coaching Association of Canada's Instructional Design Model and CSCP Technical Committee's referent model.

Coaches working within the Competition Introduction Context, work typically with athletes who are in Stage 3: Learn to Train or, Stage 4: Train to Train of the Long Term Athlete Development Pathway.

STAGE 3: LEARN TO TRAIN
(Female 8 - 11, Male 9 -12)

FOCUS
- Develop fundamental snowboard skills
- Master foundation sport skills

ATHLETE PLAN
- Two distinct competitive seasons in multiple sports.
- Focus continues on sport skill development.
- Snowboard training 3 days a week during season and 1/3 competitions per year (multi-discipline)
- Intro of strenght and mental training

STAGE 4: TRAIN TO TRAIN
(Female 11 - 15, Male 12 - 16)

FOCUS
- Develop technical discipline specific snowboard skills
- Fitness skill development

ATHLETE PLAN
- Seasonal snowboard plan focused on multi disciplines within speed or style building towards Provincial and Jr. National Championships
- Training 6 - 9 times a week
- Snowboard + complementary sports
- High volume and repetition
- Continued participation and competition in the off season in other sports

It is recommended that coaches use the material in this manual to deepen their understanding of the sport and then modify the material as required to suit their contextual needs.

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National Coaching Certification Program

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PARTNERS IN COACH EDUCATION

The National Coaching Certification Program is a collaborative program of the Government of Canada, provincial/territorial governments, national/provincial/territorial sport organizations, and the Coaching Association of Canada.

Alberta Sport Connection

British Columbia

Sport Manitoba

Newfoundland Labrador

New Nouveau Brunswick Canada

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Yukon Community Services Sport and Recreation Branch

The programs of this organization are funded in part by Sport Canada.

Canada

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1. GETTING STARTED

1.1 CSCP PROGRAM OVERVIEW

"Better Riders Through Better Coaches"

The Canada Snowboard Coaching Program (CSCP), is under the umbrella of Canada Snowboard (CS) and is responsible for the training and certification of snowboard coaches in Canada. The CSCP's Technical Education Committee, along with CSCP's Learning Facilitators and Evaluators are active coaches that develop material, deliver snowboard coach workshops and evaluate coach competencies, respectively.

The CSCP materials address a holistic approach to developing riders and have been developed through partnerships with a number of organizations, namely, the Coaching Association of Canada (CAC), the National Coaching Certification Program (NCCP) and the Canadian Association of Snowboard Instructors (CASI).

The CSCP is an integral part of the Canada Snowboard's Park to Podium, Canada Snowboard's Long Term Athlete Development Plan (LTAD), which is available at www.canadasnowboard.ca. The LTAD is a roadmap for athletes, parents, coaches and provincial/national sport organizations, to sequence an athlete's physiological and mental skill development from basics to international success; from playground to podium. An overview of the LTAD, is displayed on the next page.

The 5 different courses of the CSCP are explained below:

COMP INTRODUCTION
The Comp Introduction typically tends to work with participants of all ages who are new to training and to the competitive side of snowboarding. Club to Regional (e.g. CS Riders, club & local events). Proficiency level: learning basic skills, consolidating Fundamentals. Stage 2-3 in athlete development: Learn to Ride

COMP INTRODUCTION ADVANCED
Goals of participation: Fun, fitness, fundamentals, and performance in regional competitions Frequency of participation: 2-4 times per week on snow. Regional to provincial (e.g. club & regional events, provincial series events). Proficiency level: Consolidating basic skills. Stage 4: Train to Train

COMP DEVELOPMENT
Goals of participation: Top Performance in provincial, NOR-AM, CWG and national competitions. Frequency of participation: 3-4 times per week on snow Level of competition: Provincial to national (e.g. Canada Games, National Championships, FIS events, Canadian Shield). Proficiency level: Refining and varying basic skills, acquiring and consolidating advanced skills. Stage 5-6: Train to Compete, Learn to Win

COMP DEVELOPMENT ADVANCED
Performance at national level events. Athletes are in a club, provincial program, or National Development Institute working towards National Development/ High Performance Team/ Level. Refinement of all aspects of a coach's quadrennial plan. Level of competition: Focus on National and Entry to International Competitions. Proficiency level: consolidation and refinement of advanced skills. Stage 6: Learn to Win.

COMP HIGH PERFORMANCE
Goals of participation: Performance in highest level of national and international competitions Frequency of participation: 5 or more times per week, on snow. Proficiency level: Refining and varying advanced skills. Stage 7: Train to Win

1.2 CANADA SNOWBOARD'S LTAD (LONG TERM ATHLETE DEVELOPMENT)

Stage 1: ACTIVE START (ages 0-6)
Physiological development: Initiation of basic human movement skills: running, jumping, kicking, throwing, catching, swimming, sliding, etc.

Stage 2: FUNDAMENTALS (ages 6-9)
Physical literacy: Interrelation of movement skills and sport skills. Speed, power and endurance are developed using sports and games.

Stage 3: LEARN TO TRAIN (ages 8-12)
Snowboard literacy: Introduces snowboarders to all disciplines. This will allow the child to identify what they like while creating a great multi-skill foundation.

Stage 4: TRAIN TO TRAIN (ages 12+)
Training literacy: Specialization and emphasis on strenght conditioning. Focus is on training rather than competing.

Stage 5: TRAIN TO COMPETE (ages 14-16+)
Competition literacy: Emphasis on developing individual strenghts through modeling, physical, technical and tactical skills.

Stage 6: LEARN TO WIN (ages 17-18+)
Excellence: Transition period between the national and international level. All performance factors are now fully established in order to optimize performance.

Stage 7: TRAIN TO WIN (ages 20-24+)
Mastery: Focus is on the preservation of high quality and consistent performances to be "winning for a living".

Stage 8: ACTIVE FOR LIFE (any age)
Transition from competition to an active lifestyle.

1.3 COMPETITION INTRODUCTION *COURSE DESCRIPTION*

Course Description
Comp Introduction is beginning of the coach pathway. The three-day **Competition Introduction** course is the first step toward coaching snowboarders in competition.

Who does a Comp Intro Coach work with?
Athletes who are transitioning from learning how to ride to entry level competitions, classified by the LTAD as Stage 3: Learn to Train.

LTAD General Description of Stage

Age Range:
- Female 8 – 11
- Male 9 - 12

Athlete development level:
- Development and consolidation of fundamental snowboarding skills
- Master foundation sport skills

Training plan:
- On snow volume 2 to 3 days a week
- Focus on sport skill development
- Two distinct competitive seasons in multiple sports
- Introduction of strength and mental training

Context of competition: club to regional:, e.g. Riders Series, entry level Provincial Events

Course content & fundamental principles of:
- Biomechanics
- Planning a session
- Support athletes in a training & competition
- Style and speed
- Analyzing performance

1.4 COMPETITION INTRODUCTION: ADVANCED *COURSE DESCRIPTION*

Course Description
The **Competition Introduction Advanced** (CIA) course is the second tier of the Coach Pathway. The five-day discipline specific workshop is focused on the skill requirements for competition in either the STYLE or SPEED disciplines.

- Comp Intro Style: Slopestyle (SS), Halfpipe (HP), Big Air (BA)
- Comp Intro Speed: Snowboardcross (SBX), Parallel Giant Slalom (PGS), Parallel Slalom (PSL)

Who does a CIA Coach work with?
Athletes who are beginning to specialize in either the Style, or Speed disciplines. CIA coaches typically work with athletes in Stage 4 Train to Train of their development.

LTAD General Description of Stage 4 (Train to Train)

Age Range:

- Females 11 – 15
- Male 12 - 16

Athlete Development Level:

- Develop technical discipline specific snowboard skills
- Fitness skill development

Training plan:

- Training 6 - 9 times / week snowboard + complementary sports or activity
- High volume and repetition
- Seasonal snowboard plan focused on multiple disciplines within speed or style discipline building toward Provincial and Jr. National Championships
- Continued participation / competition in off season in other sport

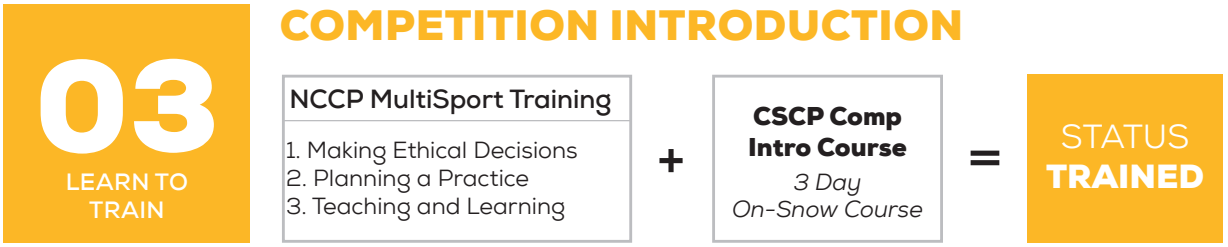
Course Content and Fundamental Principles of:

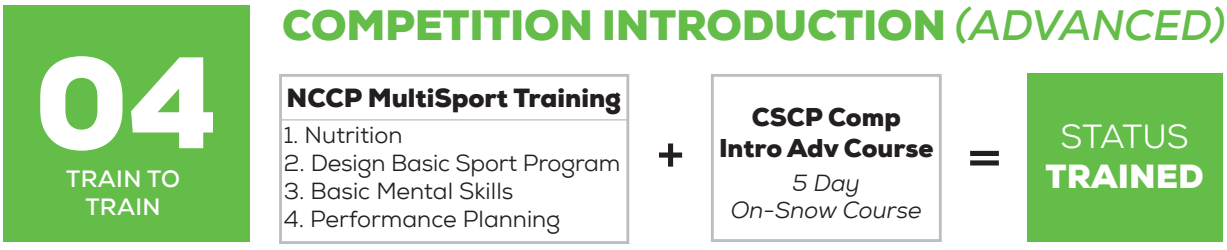
- Biomechanics
- Design a Snowboard Program
- Support Athletes in Competition
- Support the Competitive Experience
- Analyzing Performance

1.5 COACHING STATUS

In order to receive "TRAINED" status the individual must purchase a CSCP License from Canada Snowboard, and fulfill the following accreditations:

- CSCP Comp Introduction Course
- Make Ethical Decisions (CI)
- Teaching and Learning (CI)
- Plan a Practice (CI)
- NCCP Comp Introduction Modules
- Nutrition (CIA)
- Basic Mental Skills (CIA)
- Design a Sport Program (CIA)





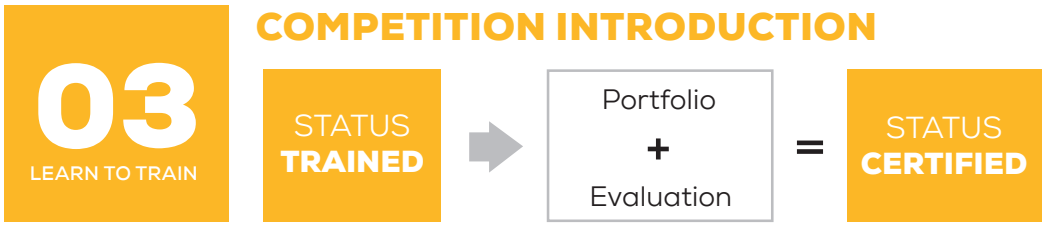
To achieve "Certified Status" a coach must complete their portfolio and complete the evaluation process.

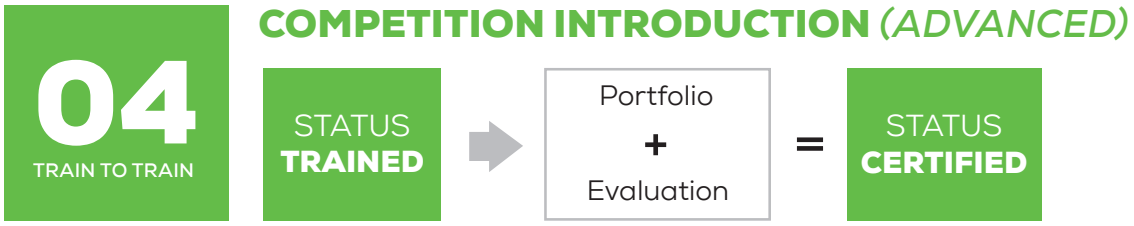
Portfolio consists of the following:

- Session Plan (CI) , 3 Session plans (CIA)
- Communication Plan (CI)
- Emergency Action Plan (EAP) (CI)
- Seasonal Plan (CIA)
- Acrobatics Air 1 Course (CIA)
- Officials Level 1 Course (CIA)
- Program Management Planning Tool (CIA)

Evaluation:
Upon submission of the portfolio the coach may schedule an evaluation with Canada Snowboard. Coaches are evaluated in the following coaching skills:

- Plan a Session (CI)
- Support to Athlete in Training (CI)
- Analyze Performance (CI)
- Support to Athlete in Competition (CIA)
- Design a Sport Program (CIA)
- Manage a Sport Program (CIA)





1.6 COMPLETE COACH DEVELOPMENT PATHWAY

ENTRY:
New coaches and those working with stage 3/4 athletes.

03 LEARN TO TRAIN

COMPETITION INTRODUCTION *(MULTI DISCPLINE)*

NCCP MultiSport Training	+	CSCP Comp Intro Course	=	STATUS	Portfolio + Evaluation	=	STATUS
1. Making Ethical Decisions 2. Planning a Practice 3. Teaching and Learning		*3 Day On-Snow Course*		**TRAINED**			**CERTIFIED**

04 TRAIN TO TRAIN

COMPETITION INTRODUCTION *(ADVANCED)*

NCCP MultiSport Training	+	CSCP Comp Intro Adv Course	=	STATUS	Portfolio + Evaluation	=	STATUS
1. Nutrition 2. Design Basic Sport Program 3. Basic Mental Skills 4. Performance Planning		*5 Day On-Snow Course*		**TRAINED**			**CERTIFIED**

ENTRY:
coaches working with stage 5+ athletes

05 TRAIN TO COMPETE

COMPETITION DEVELOPMENT

6 NCCP Comp Dev Modules	+	CSCP Comp Dev Course	=	STATUS	Portfolio + Evaluation	=	STATUS
		6 Day On-Snow Course		**TRAINED**			**CERTIFIED**

06 LEARN TO WIN

COMPETITION DEVELOPMENT *(ADVANCED)*

Competition Development Certification	+	Advanced Coaching Diploma	=	STATUS	Portfolio + Evaluation + Custom Snowboard Curriculum	=	STATUS
		2-Year Course		**TRAINED**			**CERTIFIED**

07 TRAIN TO WIN

COMPETITION HIGH PERFORMANCE

Evaluation	+	Custom Curriculum	=	Chartered Professional	ON-GOING PROFESSIONAL DEVELOPMENT

1.7 COACH VS INSTRUCTOR

COACH FOR COMPETITION	INSTRUCTOR FOR RECREATION
Long term goals: 1 day to 10 years. Entry level to High Performance	Shorter term goals: 1 hour to multi week or season long program. Beginner to expert
Performance	Management/Control/Performance
8 Skills concept	5 Skills concept
Detection & Correction (D & C)	Analysis & Improvement (A & I)
Turn initiation from inclination	Turns initiated with hips inside the turn, as well as rotation of hips, knees or feet
Decision training, cues and evaluative feedback techniques	''To/try'' feedback technique, tactics for improvement. Lesson planning based on analysis
Managing instability	Controlling balance, enhancing stability
Mid-weighting	Up, down and mid-weighting
Certification based on competency	Certification based on knowlegde and technical skills
Refer to CSCP Coach Development Pathway	Certification: L1: 3 day course. L2: 3 day course + 1 day exam. L3: 4 day course + 2 day exam. L4: 5 day course + 3 day exam
Employer is club, team, sponsor, provincial association, national federation, athlete or parent.	Employer is resort snow school, private/ travelling snow school and national association

1.8 PUTTING IT ALL TOGETHER

Competition Introduction focuses on Stage 3, Learn to Train and Stage 4, Train to Train. The ability level of the athlete's ranges from club level riders that compete in the local competition series to Provincial Snowboard Association sanctioned competitions.

This chart shows all available programs, events and what coaching course is needed per stage.

INSTRUCTORS ↑ / ↓ COACHES

LTAD STAGE	PROGRAMS	COMPETITIVE OPPORTUNITIES	COACHING COURSE
01 ACTIVE START AGES 0-6	SNOW SCHOOL	—	CASI
02 FUNdamentals AGES 6-9	SNOW SCHOOL	—	CASI
03 LEARN TO TRAIN AGES 8-12	**RIDERS PROGRAM**	LOCAL RACES (RIDERS EVENTS)	COMP INTRO (MULTI-DISCPLINE)
04 TRAIN TO TRAIN AGES 12+	CLUBS	PROVINCIAL EVENTS	COMP INTRO ADVANCED
05 TRAIN TO COMPETE AGES 14-16+	PROVINCIAL TEAMS	PROVINCIAL EVENTS NATIONALS	COMP DEVELOPMENT
06 LEARN TO WIN AGES 17-18+	DEVELOPMENT TEAMS	WORLD CUP TOUR + WHC	COMP DEVELOPMENT ADVANCED
07 TRAIN TO WIN AGES 20-24+	NATIONAL TEAM + OLYMPIC TEAM	WORLD CUP TOUR + OLYMPICS	COMP HIGH PERFORMANCE

1.9 RIDERS PROGRAM

The competitive system chart, explained on the previous page includes the RIDERS Program in Stage 3. RIDERS is a fun, multi-discipline focused skill development program designed for athletes at stage 3, Learn to Train of the snowboard Long Term Athlete Development (LTAD) Model.

Athletes advance their fundamental snowboard skills and develop the specific skills required to enter each of the competitive snowboard disciplines.

Introducing snowboarders to all of the competitive snowboard disciplines at this stage ensures holistic skill development, allowing the athlete to potentially identify a discipline they prefer, while creating a solid multi-skill foundation to build upon.

The program includes three levels of programming, Green, Blue, and Black. Each level of the program has corresponding session plans to be delivered in 8-12 weeks with options to modify the delivery for a variety of program formats and lengths.

Regardless of leader experience, the RIDERS Program, by design, ensures athletes are challenged with fun games, drills and activities to continue to develop their snowboard skills. The curriculum follows a progressive pattern and is designed to achieve specific outcomes. Coaches have the freedom to manipulate the session plans, but are encouraged to always meet the goals and objectives set out in the session plans.

The RIDERS Speed & Style Events introduces athletes to competitive snowboarding through a multi-discipline skills course designed to challenge freestyle, snowboard cross and alpine skills. Components of each of the competitive snowboard disciplines and features are incorporated into one competitive arena / course to showcase overall snowboard skill progression. Athletes are encouraged to interact with each of the features on course in their own creative way and are assessed on their ability to successfully navigate each of the features found on course.

For more information, please visit:
http://www.canadasnowboard.ca

Photo: Inga Bailey

1.10 NCCP CORE COACH COMPETENCIES

The National Coaching Certification Program (NCCP) recognizes the following competencies that are integral to successful coaching:

1. VALUING

The ability to choose an effective response to a specific coaching situation, that is consistent with principles of ethical practice defined within the NCCP.
It may be understood as a two-step process:

- Awareness of personal values
- Awareness of values in Canadian Coaching

2. PROBLEM SOLVING

The ability to bring about a positive outcome to meet a specific coaching challenge.
It may be understood as a four-step process:

- Analyze the conditions in a specific coaching situation.
- Identify possible coaching responses
- Choose an effective response.
- Turn decisions into action.

3. INTERACTION

The ability to interact effectively with individuals, groups or teams in a specific context. It may be understood as a dynamic interpersonal process performed with a clear purpose, which requires the ability to:

- Communicate effectively
- Give and receive feedback
- Interact with others both in coaching and in a social context
- Intervene with others to manage and/or resolve conflict.

4. CRITICAL THINKING

The ability to reflect upon and/or monitor the outcome of situations, experiences, decisions and/or actions in which one or others are involved, and to assess their relevance and importance as a basis for future action.

5. LEADERSHIP

The ability to influence others to accept, willingly, the leader's purpose and goal to help bring about some better future outcome or result, and to work together, voluntarily, towards achieving that end.

1.11 NCCP COACH SKILLS

Coach competencies are demonstrated through the coach's actions and behaviours. These seven coaching skills are consistent throughout the CSCP's coach development pathway. In the CIA context, the expectation is that coaches regularly demonstrate the following coach skills.

COACHING SKILL 1: MAKING ETHICAL DECISIONS (MED)

- Core competency: Valuing
- Coach correctly applies the NCCP MED process

COACHING SKILL 2: DESIGN A SNOWBOARD PROGRAM (DSP)

- Core competency: Problem solving
- Outlines structure of own program based on training and competition opportunities.
- Identifies appropriate measures to promote athlete development within own program.
- Integrates seasonal training priorities into own practice plans.

COACHING SKILL 3: PLAN A SESSION (PAS)

- Core competency: Critical thinking, problem solving
- Identifies appropriate logistics for practice
- Identify appropriate activities in each part of the practice
- Design an emergency action plan EAP

COACHING SKILL 4: ANALYZE PERFORMANCE (AP)

- Core competency: Interaction, critical thinking
- Detection & Correction of technical performance
- Detection & Correction of tactical performance

COACHING SKILL 5: SUPPORT TO ATHLETES IN TRAINING (SAT)

- Core competency: Leadership, interaction
- Ensures that the practice environment is safe.
- Implements an appropriately structured and organized practice.
- Makes interventions that promote learning.

COACHING SKILL 6: SUPPORT TO ATHLETES IN COMPETITION (SAC)

- Core competency: Leadership, interaction, Critical thinking
- Pre-competition: Implements procedures that promote readiness for performance.
- During event: Makes decisions and interventions that promote sport specific performance
- Post event: Uses the competitive experience in a meaningful manner for the development process of the athletes.

COACHING SKILL 7: MANAGE A SNOWBOARD PROGRAM (MSP)

- Core competency: Interaction
- Manages administrative aspects of program and oversees logistics
- Coach reports on athlete progress throughout the program
- Develops and implements fair selection procedures
- Implements recruitment and talent identification procedures

2. RESPONSIBLE COACHING

As a coach, every decision should be lead by the 'Do no harm principle'.

To make ethical decisions, coaches need to have an understanding of what is ethical and what is not. Every coach's philosophy must adhere to the Coaches of Canada Code of Ethics. Coaches should continue to refine their philosophy throughout their career.

2.1 MAKE AN ETHICAL DECISION *ONLINE TEST*

At all context stages of the CSCP Coach Development Model, a coach must complete the NCCP's Making Ethical Decisions (MED) online evaluation. Please visit www.coach.ca to complete the evaluation for your current context.

When making a coaching decision, use the Coaches Association of Canada's six-step ethical decision-making process:

OUTCOME: MAKE ETHICAL DECISIONS	
Evidence	**Criterion: Apply a 6 step ethical decision making process**
MED Online	Establish the facts of the situation
MED Online	Determine "what is at stake" (ethically, legally)
MED Online	Identify potential decisions and outline possible consequences in each case.
MED Online	Identify pros and cons of each option
MED Online	Select the best option
MED Online	Design an action plan and a plan to manage the consequences

2.2 COACHES AS PROFESSIONALS

Coaches of Canada are the only organization that grants official designations to professionals in the field of coaching in Canada.

"In an effort to stem the tide of bad publicity surrounding inappropriate coaching practices the Canadian Federal Government, through a task force, recommended the professionalization of coaching. Coaches of Canada has emerged as the organization that is working to make this happen. The organization is eligible to grant the professional designation of Chartered Professional Coach (ChPC). Deciding to be a profession and achieving public acceptance and benefits accorded to other practitioners with professional status is a difficult challenge: but one that Coaches of Canada is undertaking.

Professionalization demands proficiency with an extensive body of knowledge that is defined, constantly updated (professional development) and set in a value framework (code of conduct and ethical practice) with controls to protect those values."

Extract from "Coaches as Professionals" by David Telles-Langdon, found in Coaches PLAN du Coach, Vol. 13 No. 1

2.3 COACHES' CODE OF CONDUCT

Coaches of Canada are committed to providing a sport environment in which the four ethical principles contained in the Coaching Code of Ethics are respected and promoted. Coaches of Canada believe that these values and ideals shall guide the communications and actions of all members of Coaches of Canada.

As a legal entity, Coaches of Canada has the authority to establish policies to govern its own affairs and to prescribe, monitor and enforce the conduct of its members pursuant to such policies.

The members of Coaches of Canada shall conduct themselves in a manner consistent with the principles and ethical standards set out in the Coaching Code of Ethics. Members who fail to meet these standards shall be subject to the disciplinary sanctions as identified within this policy.

Members who are sanctioned under this policy may be subject to the disciplinary rules and processes of other associations, clubs or organizations in which they are involved in a coaching capacity, separate and apart from Coaches of Canada. In serious cases, members may also be subject to criminal prosecution.

2.4 COACHES' CODE OF ETHICS

The code of ethics is organized around four ethical principles identified during a workshop for Coaching Ethics Advisory Committee members.

Respect For Participants
The principle of respect for participants challenges coaches to act in a manner respectful of the dignity of all participants in sport. Fundamental to this principle is the basic assumption that each person has value and is worthy of respect.

Responsible Coaching
The principle of responsible coaching carries the basic ethical expectation that the activities of coaches will benefit society in general and participants in particular and will do no harm. Fundamental to the implementation of this principle is the notion of competence - responsible coaching (maximizing benefits and minimizing risks to participants) is performed by coaches who are "well prepared and current" in their discipline.

Integrity in Relationships
Integrity means that coaches are expected to be honest, sincere and honourable in their relationships with others. Acting on these values is most possible when coaches possess a high degree of self-awareness and the ability to critically reflect on how their perspectives influence their interactions with others.

Honouring Sport
The principle of honouring sport challenges coaches to recognize, act on and promote the value of sport for individuals and teams and for society in general.

2.5 THE RESPONSIBLE COACHING MOVEMENT

The Responsible Coaching Movement (RCM) is a multi-phase system-wide movement, coordinated by the Coaching Association of Canada and the Canadian Centre for Ethics in Sport that has the potential to affect all sport organizations and coaches. The RCM is the result of extensive ongoing consultation with the Canadian Sport Community. These consultations will guide the different phases of the RCM that will address the role coaches play with issues relating to the health and safety of athletes, both on and off the field of play.

The RCM is made of three areas of focus:

- **Rule of Two**

The Rule of Two states that there will always be two screened and NCCP trained or certified coaches with an athlete, especially a minor athlete, when in a potentially vulnerable situation. This means that any one-on-one interaction between a coach and an athlete must take place within earshot and view of the second coach, with the exception of medical emergencies. One of the coaches must also be of the same gender as the athlete. Should there be a circumstance where a second screened and NCCP trained or certified coach is not available, a screened volunteer, parent, or adult can be recruited. This rule serves to protect minor athletes in potentially vulnerable situations by ensuring that more than one adult is present. Vulnerable situations can include closed doors meetings, travel, and training environments. Organizations are encouraged to create and implement policies and procedures that limit the instances where these situations are possible.

- **Background Screening (Including Criminal Record Checks)**

The background screening process involves using a number of different tools to ensure coaches meet the necessary security requirements to coach athletes. These tools include comprehensive job postings, criminal record checks, interviews, and reference checks. In addition, child and youth training with specific special needs populations may be required.

- **Respect and Ethics Training**

Increasing coaches' ethical conduct and ethical behaviour toward athletes requires that coaches be trained to understand what it means to act ethically. This training would include the Make Ethical Decisions module within the National Coaching Certification Program (NCCP), as well as training in abuse and harassment prevention, such as Respect in Sport, before and during their coaching career. Sport organizations may also determine their own additional standards of ethical behaviour for coaches.

"AS A COACH IT IS YOUR RESPONSIBILITY TO UNDERSTAND AND EXPLAIN TO YOUR ATHLETES THEIR ROLES AND RESPONSIBILITIES AROUND DRUGS AND THE COMPETITIVE EXPERIENCE. ATHLETES AND PARENTS WILL REQUIRE INFORMATION ON BANNED SUBSTANCES THAT MAY BE FOUND IN REGULAR USAGE IN SOCIETY FOR BOTH MEDICINAL AND RECREATIONAL SITUATIONS."

2.6 THE WORLD ANTI-DOPING AGENCY (WADA)

The World Anti-Doping Agency's (WADA) mission is to lead a collaborative worldwide campaign for doping-free sport.

WADA was established in 1999 as an international independent agency composed and funded equally by the sport movement and governments of the world. Its key activities include scientific research, education, development of anti-doping capacities, and monitoring of the World Anti Doping Code (Code) – the document harmonizing anti-doping policies in all sports and all countries. WADA is a Swiss private law Foundation. Its seat is in Lausanne, Switzerland, and its headquarters are in Montreal, Canada.

WADA works towards a vision of a world where all athletes compete in a doping-free sporting environment.

2.6.1 WORLD ANTI-DOPING CODE

One of the most significant achievements in the fight against doping in sport to date has been the drafting, acceptance and implementation of a harmonized set of anti-doping rules, the World Anti-Doping Code (Code).

The Code is the core document that provides the framework for harmonized anti-doping policies, rules and regulations within sport organizations and among public authorities. It works in conjunction with five International Standards aimed at bringing harmonization among anti-doping organizations in various areas: testing, laboratories, Therapeutic Use Exemptions (TUEs), the List of Prohibited Substances and Methods, and for the protection of privacy and personal information.

This harmonization works to address the problems that previously arose from disjointed and uncoordinated anti-doping efforts, such as, among others, a scarcity and splintering of resources necessary to conduct research and testing, a lack of knowledge about specific substances and procedures being used and to what degree, and an uneven approach to penalties for athletes found guilty of doping.

Since it entered into force on January 1, 2004, the Code has proven to be a very powerful and effective tool in the harmonization of anti-doping efforts worldwide. This has been demonstrated by the overwhelming support of governments and sports in accepting the Code, in addition to the growing body of jurisprudence from the Court of Arbitration for Sport (CAS) in supporting the Code's tenets.

The adoption of the Code led to several significant advances in the global fight against doping in sport, including the formalization of certain rules as well as the clarification of stakeholder responsibilities. This brought about harmonization to a system where previously rules had varied and, in some cases, did not exist.

http://www.wada-ama.org/en/

WORLD ANTI-DOPING AGENCY
play true

Additionally, the Code introduced the concept of "non-analytical" rule violations, meaning that a sanction can be applied in cases where there is evidence that an anti-doping rule violation occurred but where there is no positive doping control test.

Building on the experience gained in the application of the Code and with the goal of enhancing anti-doping programs worldwide, WADA initiated a consultation process, in 2006, for the practical review and fine-tuning of the Code's provisions. Throughout the revision process, WADA encouraged comments and suggestions, from both its stakeholders and all those who want clean and fair sport that would benefit the global community of athletes.

Following an open and transparent consultation process that included three phases and the publication of several preliminary drafts, the revised Code was unanimously adopted by WADA's Foundation Board and endorsed by the 1,500 delegates present on November 17, 2007, the final day of the Third World Conference on Doping in Sport, in Madrid, Spain. The revisions to the Code took effect on January 1, 2009.

The Code review process resulted in an even stronger, more robust tool to ensure that all athletes benefit from the same anti-doping procedures and protections, no matter the sport, the nationality, or the country where tested, so that, in the end, athletes may participate in competition that is safe and fair.

2.6.2 NOTABLE LINKS FOR ANTI-DOPING INFO:

- Canadian Centre for Ethics in Sports (CCES): http://www.cces.ca/index.php
- Doping Control Procedures: http://www.cces.ca/en/worldantidopingvideo
- World Anti-Doping Agency (WADA): http://www.wada-ama.org/en/

2.7 COACH LIABILITY

More than ever before, coaches are aware of the risks and responsibilities they assume when they coach. These risks and responsibilities include those that are legal in nature. No matter what their certification, experience, employment or volunteer status, sport discipline, or location of residence, coaches at all times have a legal obligation to provide a safe environment for athletes.

To understand this obligation more fully, coaches must understand some key legal principles, including negligence and liability. Coaches must also understand concepts and techniques related to risk management. With this knowledge, coaches can determine the applicable standard of care, can assess their own coaching situation for risks, and can put in place appropriate measures to manage these risks.

2.7.1 NEGLIGENCE

Negligence is a term with precise legal meaning. The term relates to standards of behaviour that the law expects, and understanding the law of negligence is an essential first step in learning how to provide a safe environment for athletes.

In general terms, negligence refers to behaviour or action that falls below a "reasonable standard of care." The law in Canada demands that we behave in a particular way so that others who might be affected by our actions are not exposed to an unreasonable risk of harm. The standard of behaviour coaches are expected to meet is termed an "objective" standard. As adults and as coaches, we are all credited with the same general intelligence and sensibility, and the law therefore expects each of us to behave in a reasonable fashion in similar situations.

The law does not expect coaches to be perfect in his or her behaviour; rather, the law expects coaches to be reasonable and act as other reasonable coaches would in the same circumstances. It is widely accepted that there is a certain amount of risk in many sport activities and that such risk is knowable, foreseeable, acceptable, and, depending on the sport, even desirable. What is unacceptable in sport is behaviour that puts athletes at unreasonable risk or in danger.

A coach's conduct is negligent when all four of the following occur:

- A duty of care exists (such as the one that exists between a coach and an athlete).
- That duty imposes a standard of care that the coach does not meet.
- An athlete or some other person experiences harm.
- The failure to meet the standard of care can be shown to have caused or substantially contributed to the harm.

For the coach, the standard of care is the most important of the above elements. The standard of care is what the coach should do in a given situation. Standard of care is difficult to define precisely because it is influenced by the risk inherent in the surrounding circumstances. Thus, the duty to act responsibly remains constant, but the specific behaviour required to fulfil that duty changes with the circumstances.

Determining what the standard of care is in any given circumstance involves looking to four sources:

- **Written standards** – these are government regulations, equipment standards, rules for a particular sport or facility, rules from a sport governing body, coaching standards and codes of conduct, and other internal risk-management policies and procedures.
- **Unwritten standards** – these are norms or conventions in a sport, an organization, or a facility that might not be written down, but are nonetheless known, accepted, and followed.
- **Case law** – these are court decisions about similar situations. Where the circumstances are the same or similar, judges must apply legal principles in the same or similar ways. Earlier decisions of the court are a guide, or precedent, for future decisions where the facts are similar.
- **Common sense** – this means simply doing what feels right, or avoiding doing what feels wrong. Common sense is the sum of a person's knowledge and experience. Trusting one's common sense is a good practice.

The responsible and prudent coach is familiar with written policies that govern him or her, is aware of unwritten norms and practices, knows something of the case law as it applies to coaches, and has learned to trust his or her intuitive judgment and common sense.

2.7.2 LIABILITY

Where all four conditions of the legal definition of negligence have been met, negligence of the coach may be established. What follows then is the question of liability. While negligence refers to conduct, liability refers to responsibility for the consequences of negligent conduct. Responsibility may lie with the coach who was negligent or with another person or entity.

For example, an insurance policy transfers the financial liability for negligence to an insurance company. A valid waiver of liability agreement might eliminate liability entirely. An injured athlete may be partially responsible for his or her injuries and thus may share liability with the negligent coach. And a sport organization may be liable for the negligent actions of its coach, whether he or she is an employee or a volunteer.

Liability can also refer to responsibility for the consequences of conduct that fails to meet a predetermined legal standard other than the standard of care in a situation where negligence occurs. In addition to arising from negligence, liability can arise when a law is broken or a contract is breached. The prudent coach avoids these types of liability by obeying laws and complying with contractual agreements.

In sum, an understanding of the legal meaning of negligence answers the coach's question: How does the law expect me to behave? The follow-up question is: How can I be sure that my behaviour will meet this expectation? The answer to this question lies in *risk management*.

2.7.3 RISK MANAGEMENT

Risk management is about taking steps to identify, measure, and control risks. This involves spending time thinking about potentially risky situations, deciding which situations might pose serious risks, and determining what steps to take to minimize those risks. The common ingredient in all these tasks is common sense.

There are four strategies for controlling risks, all of which are important to coaches:

- Retain the risk – the risk is minor and is inherent in the sport activity, and the coach is willing to accept the consequences. The coach therefore does nothing about the risk. In sport, this is often a legitimate risk-management strategy.
- Reduce the risk – the risk is moderately significant and the coach takes measures to reduce the likelihood of the risk occurring or minimize its consequences if the risk occurs; the coach does this by planning carefully, supervising athletes appropriately, and educating athletes.
- Transfer the risk – the risk is significant and it is transferred to others through contracts, including waivers and insurance.
- Avoid the risk – the risk is severe and the coach decides to avoid anything that may cause the risk.

A word of caution: there is no template, formula, or checklist for managing risk. The law expects coaches to provide a safe environment for athletes, but what that means for a coach's conduct will vary with circumstances, including athletes' age and skill level and the environment where the coaching activity occurs.

The Coach's Personal Risk-Management Plan

The informed and prudent coach protects himself or herself by implementing a personal risk-management plan. This plan helps the coach in two ways. First, it promotes a safe program and helps prevent injuries from occurring. Second, it helps protect the coach from liability claims when an injury cannot be prevented.

Coaches can, and should, practice their own personal risk management by following this ten-point plan:

1. Be familiar with and adhere to applicable standards, both written and unwritten, as well as internal policies and rules governing the facility, the sport, and your program.
2. Monitor your athletes' fitness and skill levels, and teach new skills in a progressive fashion suitable to their age and skills. Never leave young athletes unsupervised.
3. If you do not have access to medical personnel or a qualified trainer, keep adequate first-aid supplies on hand; ideally, you should be trained in administering first aid.
4. Develop an Emergency Action Plan for the facility or site where you regularly hold practices or competitions. Carry with you, at all times, emergency contact numbers and athletes' medical profiles.
5. Inspect facilities and equipment before every practice and competition. Take steps to ensure any deficiencies are corrected immediately, or adjust your activities accordingly to avoid the risk.
6. Work with your employer or sport organization to develop and use appropriately worded assumption-of-risk agreements in your programs. Where appropriate, develop and use agreements waiving liability; these are suitable only for adult athletes.
7. You should be covered by the liability insurance policy of your employer if you are paid for your coaching services, by the liability insurance policy of your organization if you are a volunteer coach. Find out whether you are covered. If you aren't, obtain your own insurance.
8. Don't be afraid to stop or withdraw from any activity that poses unreasonable risks. This could include stopping a practice or removing your team or your athletes from a competition.
9. Trust your common sense and intuition!
10. Actively pursue your own training, professional development, and coaching certification.

2.8 SAFETY

2.8.1 GEAR

Helmets are the most important safety gear and are mandatory in many parks and all competitions.

Helmets need to be snowboard certified and chin straps should be used at all times. Check www.canadasnowboard.ca for more information on what a certified helmet is. Coaches should regularly check their riders helmets for its condition (ie. Cracks, foam in good condition, etc).

Injured wrists, shoulders, and concussions are the most common snowboard injuries at this level of riding.

Photo: Jim Hall

2.8.2 FACILITY INSPECTION

Coaches need to inspect the facility in which they have their athletes training and competing in. An inspection is done to ensure the facility has the proper safety measures in place and that things are in good condition (both snow quality, feature quality and condition as well as safety features (netting, etc.).

2.8.2.1 Inspecting Equipment and Facilities

- Ensure that you are fully aware of the specific safety standards related to the equipment used in your sport.
- Take an inventory of collective and individual equipment.
- Take an inventory of available first-aid equipment. Carry a first-aid kit at all times. (See the NCCP Planning a Practice module for an example of the contents of a first-aid kit.)
- Assess the safety of the facility itself (e.g. walls, playing area, lighting) by completing a facility safety checklist
- Identify environmental, equipment and facilities, and human risk factors.
- Ensure that athletes wear their protective equipment and that it is properly adjusted and in good condition.

2.8.2.2 Informing Athletes and Parents

- Inform parents and athletes of the risks inherent in the sport.
- Fully explain the safety procedures and instructions related to all activities, and check that athletes understand them.
- When explaining an activity during a practice or competition, highlight potential risks.
- Examples: If athletes are required to cross trails, ask them to keep their heads up and to be alert to where others are as they are moving around.

2.8.2.3 Supervising Activities

- Ensure that the number of athletes involved is not so high as to compromise supervision and safety.
- Keep in mind that athletes need constant supervision. Stop all activities when you have to leave the room or site or delegate responsibility for the group to a competent person.
- Look for signs of fatigue and aggression in athletes; if necessary, stop the activity.

2.8.3 PARK SAFETY

Snowboard parks are uncontrolled areas with variable terrain and features designed to send riders into the air. Always start the day with a thorough park inspection. Point out certain important safety considerations before riding it.

Stop zones are specific areas where riders can stop between park sections. Identify them and stop facing uphill will gauge if it is a safe spot.

Check the takeoffs, length of tables, and condition of the landings before riding the jumps.

Watching other riders will also help gauge speed and flight path. Be aware of changing snow and weather conditions as they can change quickly and affect approach and exit speeds.

Spotter signals are signed from on top of the features

"O" for OK, "X" for NOT OK.

Jump open

Jump closed

Drop-in calls are important for riders to call their drop-in, especially at the halfpipe or at any jump with multiple takeoffs. Riders should get in line or raise their arm (calling "Dropping next!"). When it is safe to go they have the right-of-way and need to call out "DROPPING!"

Teaching proper park "ethics" will help everyone get along and stay safe.

BURTON SMART STYLE PROGRAM

1. MAKE A PLAN
Every time you use freestyle terrain, make a plan for each feature you want to use. Your speed, approach and take off will directly affect your maneuver and landing.

2. LOOK BEFORE YOU LEAP
Scope around the jumps first, not over them. Know your landings are clear and clear yourself out of the landing area.

3. EASY STYLE IT
Start small and work your way up. (Inverted aerials not recommended).

4. RESPECT GETS RESPECT
From the lift line through the park.

See **www.nsaa.org/nsaa/safety/smart-style/** for more details.

THE ALPINE RESPONSIBILITY CODE

Knowing, and teaching, the Alpine Responsibility Code is always useful.

1. Always stay in control. You must be able to stop, or avoid other people or objects.
2. People ahead of you have the right-of-way. It is your responsibility to avoid them.
3. Do not stop where you obstruct a trail or are not visible from above.
4. Before starting downhill or merging onto a trail, look uphill and yield to others.
5. If you are involved in or witness a collision or accident, you must remain at the scene and identify yourself to the Ski Patrol.
6. Always use proper devices to help control runaway equipment.
7. Observe and obey all posted signs and warnings.
8. Keep off closed trails and closed areas.
9. You must not use lifts or terrain if your ability is impaired through use of alcohol or drugs.
10. You must have sufficient physical dexterity, ability, and knowledge to safely load, ride, and unload lifts. If in doubt, ask a lift attendant.

2.9 EMERGENCY ACTION PLAN

Managing risk in snowboarding should be consistently at the forefront of a coaches' thinking and session planning. Although there are many inherent risks to riding (which is part of the attraction), there are things that a coach can do to consistently minimize unnecessary risk while promoting athlete development.

An Emergency Action Plan (EAP) is a plan designed by coaches to assist them in responding to emergency situations. The idea behind having such a plan prepared in advance is that it will help you respond in a responsible and clear-headed way if an emergency occurs. An EAP should be prepared for the facility or site where you normally hold practices and for any facility or site where you regularly host competitions. For away competitions, ask the host team or host facility for a copy of their EAP.

An EAP can be simple or elaborate but it should cover the following items:

- Designate in advance who is in charge in the event of an emergency (this may very well be you).
- Have a cell phone with you and make sure the battery is fully charged. If this is not possible, find out exactly where a telephone that you can use is located. Have spare change in the event you need to use a pay phone.
- Have emergency telephone numbers with you (facility manager, fire, police, ambulance) as well as contact numbers (parents/ guardians, next of kin, family doctor) for the participants.
- Have on hand a medical profile for each participant, so that this information can be provided to emergency medical personnel. Include in this profile a signed consent from the parent/guardian to authorize medical treatment in an emergency.
- Prepare directions to provide Emergency Medical Services (EMS) to enable them to reach the site as rapidly as possible. You may want to include information such as the closest major intersection, one way streets, or major landmarks.
- Have a first aid kit accessible and properly stocked at all times (all coaches are strongly encouraged to pursue first aid training).
- Designate in advance a "call person" (the person who makes contact with medical authorities and otherwise assists the person in charge). Be sure that your call person can give emergency vehicles precise instructions to reach your facility or site. When an injury occurs, an EAP should be activated immediately if the injured person:
    - is not breathing
    - does not have a pulse
    - is bleeding profusely
    - has impaired consciousness
    - has injured the back, neck or head
    - has a visible major trauma to a limb

First Aid & CPR Training:
Coaches should take a basic first aid and CPR course and keeping your certification up to date. While ski patrol are always available while at the ski hill. it is a good idea to have basic knowledge in case of emergency. Canadian Red Cross offers a wide variety of courses across the country. For more information see their website as: www.redcross.ca

Keep this information in a waterproof binder that you can carry with you to the training or competition site. Find out if 911 services are accessible from your facility or if there is medical support on-site.

EMERGENCY ACTION PLAN CHECKLIST

ACCESS TO TELEPHONES

- ☐ Cell phone, battery well charged
- ☐ Training venues/Resort contact person/ Ski Patrol phone number
- ☐ Home venues / event contact person
- ☐ Away accommodation/hotel
- ☐ List of emergency phone numbers (home and competitions)
- ☐ List of emergency numbers (away competitions)
- ☐ List of all parents and athletes cell phone numbers

DIRECTIONS TO ACCESS THE SITE

- ☐ Accurate directions to the site/resort
- ☐ Accurate directions to the slope
- ☐ Accurate directions to nearest hospital or trauma center

PARTICIPANT INFORMATION

- ☐ Personal profile forms
- ☐ Emergency contacts
- ☐ Medical profiles

PERSONNEL INFORMATION

- ☐ The person in charge is identified
- ☐ The call person is identified
- ☐ Assistants (charge and call persons) are identified

ANYTHING ELSE?

- ☐ Fill out CSSA out of country application form (if traveling out side the country)

The medical profile of each participant should be up to date and located in the first aid kit. A first aid kit must be accessible at all times, and must be checked regularly.

2.10 INJURY MANAGEMENT

Even with a coach working to mitigate risk, injuries in snowboarding will happen. Coaches must work to then manage the care of the athlete and following, put a return to play plan into place, which is focused on the long-term health of the athlete.

2.10.1 CONCUSSION & RETURN TO PLAY

Canada Snowboard and the Coaching Association of Canada have created 'Making Headway', a FREE e-learning concussion module available at www.coach.ca

CS CONCUSSION MANAGEMENT PROTOCOL

A concussion is a disturbance in the functioning of the brain following a direct blow to the head, face or neck, or by a blow elsewhere on the body that transmits an "impulsive force" to the head, which may or may not cause a loss of consciousness. This typically results in the rapid onset of a short-lived impairment of neurologic function that resolves spontaneously. This resolution of the clinical and cognitive symptoms typically follows a sequential course. Athletes suffering from a concussion can display a wide variety of signs and symptoms, some of which can be very subtle.

PRESEASON ASSESSMENT

All athletes will undergo a preseason physical exam, which will include baseline neurocognitive testing with the computer based ImPACT test. This test can be done on-line (see http://www.impacttest.com/). A baseline test should be repeated at least once per year. ImPACT includes a detailed concussion history, which includes very specific symptom-based questions about previous head injuries, loss of consciousness, cognitive symptoms and time off snowboarding or training due to concussion. It is important to identify athletes that are not fully recovered from previous concussion, as they are more vulnerable for recurrent injury, persistent post concussive symptoms, cumulative injury and potentially even life threatening injury, with subsequent concussive injury.

CONCUSSION

Concussions can occur even if there is no loss of consciousness. Most concussions resolve spontaneously and sequentially within 7-10 days. Sometimes concussion symptoms or signs persist beyond 10 days and may become permanent. A medical expert in cerebral concussion should be consulted for athletes with cerebral concussions.

Post concussive symptoms can be physical, cognitive and emotional.

- Physical symptoms – include headache, nausea, and dizziness, ringing in the ears, double vision or other visual disturbances.
- Cognitive symptoms – include confusion, amnesia, disorientation, poor concentration, memory disturbance.
- Emotional symptoms – include depression, moodiness.

ACUTE INJURY MANAGEMENT FOR CONCUSSION

A physiotherapist and team physician will be on-site during training and competition. Should a crash or head injury occur, the athlete will be evaluated by the physician and physiotherapist. Full cervical spine precautions and management must be used, due to possible cervical spine injury.

Where a team physician is not present, the physiotherapist will evaluate any athlete suspected of having a concussive injury at training or competition venues, and then bring that athlete to the attention of one of the physicians at the venue if possible. The Medical Director may also be contacted if necessary, but should be notified of the injury at the first available opportunity.

Any athlete that is felt to have sustained a concussive injury will be withdrawn from that race or training session and undergo a formal medical evaluation. Any athlete complaining of headache, nausea, change in vision, ringing in the ears, confusion, or dizziness; or displaying poor coordination, poor balance, difficulty answering questions or easy distractibility should be immediately brought to the attention of the physician and physiotherapist.

It is important that any athlete suspected of suffering a concussive injury not be left alone and be monitored for signs and symptoms of deterioration in the immediate post-injury period. In the event of a structural brain injury, signs may include: increasingly severe headaches, decreasing level of consciousness, increasing tiredness and confusion, lateralizing (to one side) weakness, persistent vomiting. Any one of these symptoms requires emergency assessment. Neuroimaging (CT or MRI) may be indicated. If these tests are performed, it is important to obtain copies of the reports as well as a CD with the images on it, to bring back with the athlete.

POST INJURY MANAGEMENT

The cornerstone of concussion management is rest, until the complete resolution of symptoms. This includes both physical and cognitive or mental rest. Athletes should therefore have a quiet environment and avoid excessive exposure to stimulation such as television, computer, video games or text messaging. Meditation has been shown to help in recovery from concussion.

Athletes should avoid alcohol and medication use after concussion. Some analgesics (painkillers) and anti-inflammatories may be prescribed, but it should be recognized that the might mask some of the signs and symptoms of concussion.

RETURN TO SNOWBOARDING PROTOCOL

The return to snowboarding progression is begun once the athlete has been off all medications and completely symptom free for a minimum of 24 hours.
We will be using the return to play guidelines from the Summary and Agreement Statement of the Third International Symposium on Concussion in Sport-Zurich 2009. This is a step-wise process, each step being separated by a minimum of 24 hours. Progression to the next step only occurs if the athlete is completely asymptomatic at the current level. With any recurrence of concussive symptoms, the athlete should drop back to the previous asymptomatic level.

REMINDER:
WITH THIS PROTOCOL, IT WILL TAKE A MINIMUM OF ONE WEEK FOLLOWING COMPLETE RESOLUTION OF SYMPTOMS BEFORE AN INDIVIDUAL OR ATHLETE CAN RETURN TO HIS OR HER APPROPRIATE LEVEL OF ACTIVITY.

Steps in the return to play protocol include:

1. Complete physical and mental rest until asymptomatic
2. Low intensity aerobic exercise (walking, spinning on a stationary bike) but no resistance training.
3. Higher intensity aerobic exercise
4. Light freeriding and can start light resistance training
5. a. After medical clearance can start more strenuous training on snow
5. b. Explosive movements and heavy resistance training should be introduced and their execution and effects must be at pre-injury levels at the minimum (consideration must be taken with regard to previous deficits in any of the physical areas because they might have contributed to the injury occurring).
6. After medical clearance return to full training for competition.
7. After full competence is shown in riding skills, reaction skills, recovery, general health and fitness excellence (as assessed by the entire Integrated Support Team, including the Medical Director, Head Physiotherapist, Strength and Conditioning coach and/or Sport Psychologist, as well as the athlete's Head Coach), the athlete may return to competition.

Repeat neuro-cognitive testing (ImPACT) will be performed once the athlete is completely symptom free after step 4. Progression to step 5 will only follow if the athlete's ImPACT scores have returned to baseline or better. In the absence of access to this on-line program, assessment and follow-up may be done using the SCAT2 (Standardized Concussion Assessment Tool). This tool includes measures of cognitive function, memory and balance testing.

Most athletes with concussion will typically easily progress through these steps over 7-10 days. An athlete with a more severe concussion (an injury where the athlete suffers persistent symptoms, specific sequelae, or prolonged cognitive impairment, or an athlete who has suffered multiple concussions) may require a prolonged period of asymptomatic rest (step 1) as well as more time at each of the subsequent steps in the progression. The team physician will supervise the progression and give final clearance for return to competition, in consultation with other members of the Integrated Support Team (IST), such as the Physiotherapist, Strength and Conditioning Coach and the Head Coach.

2.10.2 REPEATED CONCUSSIONS

Some data suggest that after a first concussion, athletes are at greater risk of future concussions. If an athlete has a history of repeated concussions, he or she should participate in sport activities only after obtaining full clearance to do so from a medical professional.

INJURY MANAGEMENT CHECKLIST
WHAT TO DO AND WHEN TO DO IT

BEFORE THE SEASON

- ☐ Have each athlete complete a medical profile
- ☐ Inform parents of possible risks
- ☐ Ensure facilities and equipment meet established safety requirements
- ☐ Create and fill in a facility safety checklist
- ☐ Review last season's injuries or common injuries in your sport

DURING THE SEASON

BEFORE A PRACTICE OR COMPETITION

- ☐ Inspect equipment and facilities
- ☐ Meet with the officials
- ☐ Prepare an Emergency Action Plan
- ☐ Plan specific safety measures for the practice/competition

DURING A PRACTICE OR COMPETITION

- ☐ Inform athletes of specific safety measures relating to activities, facilities and equipment
- ☐ Ensure there is proper supervision
- ☐ Evaluate athletes
- ☐ Ensure that fair play principles are followed

AFTER A PRACTICE OR COMPETITION

- ☐ Store equipment safely
- ☐ Fill in an accident report if necessary

AFTER THE SEASON

- ☐ Store equipment safely

3. DESIGN A SNOWBOARD PROGRAM

3.1 INTRODUCTION

The CI coach works to develop a program for the winter snowboard season for Stage 3: Learn to train athletes. The coach will create a program focused on training while also integrating available competitive opportunities.

The CIA coach must develop a program for an entire season for a Stage 4: Train to train athlete. The coach will create a program based on available training and competitive opportunities. Season long training priorities (goals) will dictate the daily training plans.

3.1.1 COACHES OUTCOME AND CRITERIA

CRITERION: OUTLINE PROGRAM STRUCTURE BASED ON AVAILABLE TRAINING AND COMPETITION OPPORTUNITIES
EVIDENCE
Prioritize athletic abilities for development in the program plan
Identify strategies used in program to improve alignment of development of athletic abilities with NSO norms pertaining to long-term athlete development/ Canadian Sport for Life principles
Determine the ratio of training to competition opportunities within the program
Compare and assess the ratio of training to competition opportunities within the program to the recommended NCCP or NSO norms pertaining to long-term athlete development

CRITERION: OUTLINE PROGRAM STRUCTURE BASED ON AVAILABLE TRAINING AND COMPETITION OPPORTUNITIES
EVIDENCE
Design weekly outlines and practice plan(s) that are contistent with the above forthe beginning, the middle and the end of the season
Use NCCP or NSO template and procedures to correctly identify athletic abilities and training objectives (development, maintenance, consolidation) to be emphasized at specific points of the season
Taking into account own program logistics, use NCCP or NSO procedures todetermine how to effectively break down the total training time available for a given week of the program into each practice

3.2 RECOMMENDED TRAINING/COMPETITION RATIOS

Recommended ratios of training and competing per stage	03 LEARN TO RIDE	04 TRAIN TO TRAIN	05 TRAIN TO COMPETE	06 LEARN TO WIN	07 TRAIN TO WIN
% Ratio of Train and Freeride/ Comp and simulation	85 / 15	75 / 25	70 / 30	70 / 30	60 / 40
Number of days on snow per year	40	50 to 70	70 to 100	100 +	150 +
Number of days in comp simulation	3	5 to 7	8 to 11	13 to 20	30 to 40
Number of days in competition	3	6 to 8	8 to 11	8 to 13	10 to 15

3.3 DESIGNING A SEASONAL TRAINING PLAN

STAGE 3 – LEARN TO TRAIN

Athletes at this stage should be training for snowboard 3 days a week during the season with 1-3 multi disciplinary competitions integrated into the season. Athletes should have continued participation in other sport during this time. Below is a recommended basic outline for a 12-week program based on the Canada Snowboard **RIDERS** program.

MICROCYCLE WEEK FOR A STAGE 3 ATHLETE							
BLOCK	MAIN PHASE						
	MON	TUE	WED	THURS	FRI	SAT	SUN
AM	School	School	School	School	School		
PM	School	School	School	School	School	Technical Training	Technical Training
PM	Sport 1	Rest	Sport 2	Sport 1	Play	Pre-hab	Pre-hab

MICRO WEEK #: 39
FROM DATE: 23-JAN-2016
TO DATE: 30-JAN-2016

STAGE 3 – LEARN TO TRAIN

TWELVE (12) WEEK ON-SNOW MULTI-DISCIPLINE PROGRAM

GOAL: FUN, holistic skill development. Learning to Ride.

In the summer, athletes at this level should be participating in other sport and working to develop a strong aerobic base.

If available, a six week pre-season program can be offered that includes things like trampoline/gymnastics training (working on agility, speed, air awareness), cross training activities such as longboarding, skateboarding, surfing, etc., and physical preparation (strength/power).

WEEK 1: Introduction + Fundamental Riding Skills
WEEK 2: Carving- Determining the Ideal Referent Model
WEEK 3: Generating Lift + Terrain Adaptation (Rollers, Bumps, Banks)
WEEK 4: Carving- Introduction to Running Gates 1
WEEK 5: Slopestyle Skills 1 (Jumps, Boxes, Rails)
WEEK 6: Snowboardcross Skills 1
WEEK 7: All Mountain Riding (+ Halfpipe)

** Optional Weeks for 12-week Programs **
WEEK 8: Review of All Disciplines + Program Wrap Up, FUN! **RIDERS Speed & Style Event
WEEK 9: Carving- Gate Running 2
WEEK 10: Slopestyle Skills 2
WEEK 11: Snowboardcross Skills 2
WEEK 12: Review of All Disciplines + Program Wrap up, FUN! **RIDERS Speed & Style Event

Always be flexible with your planning. Snow conditions, facilities available, time of season, etc. can all cause shifts in a schedule.

When designing a program, the following must be considered;
- Age and stage of athletes
- Time of year
- Facilities available
- Length of program

When planning for a season, think long-term and remember you are working to set the athletes up for success ten years from now. Athletes need mileage and time to learn skills before moving on.

The CSCP Comp Intro Advance course introduces coaches to planning discipline specific yearly plans and the CSCP Comp Dev begins to look at quadrennial planning.

Athletes at this stage should be participating in competitive sport training 3 days a week during the summer months as well as 3 days a week of other activity/sport.

3.4 DESIGNING A SEASONAL TRAINING PLAN

STAGE 4 – TRAIN TO TRAIN

MACROCYCLES FOR STAGE 4:
Train to train athletes are usually a full year in length, and include preseason, in-season, and post-season periods. These are also referred to as preparation, competition and transition periods. Develop the macrocycle by first creating "SMART" goals (with the athlete) and then establishing benchmarks (process goals) that will contribute to the major goals. Ideally, all contributing factors converge so that the athlete can have success at the peak point in the season (an art that will take refinement over years of coaching).

For this stage of rider, the preparation period will most often be a fall pre-season training program to build strength and help prepare for the season. Length may range from a few microcycles (weeks) up to 3 or 4 mesocycles (total of 16 microcycles) when using the entire fall (Sept-Dec). The competition period will typically take place throughout the on-snow winter months when athletes are actively training and attending competitions.

At this stage, athletes should be training 6-9 training sessions/week. This would include time on snow as well as physical training and complementary training (acrobatic & gymnastics), year round. Athletes at this stage should have a summer sport or complementary activity.

3.5 PERIODIZATION

A seasonal or yearly training plan can be divided into structural blocks where volume, intensity and rest are manipulated to optimize performance for a targeted event or group of events. A series of training and recovery blocks start with a single workout or session. Multiple sessions are combined to form a training day, and several training days combine to create a micro cycle. The micro cycles are combined for a weekly cycle. Weekly schedules add together to form a two to ten week training block. Training blocks are combined to form your seasonal or yearly training plan (Zatsiorsky & Kraemer, 2006).

PERIODIZATION HIERARCHY CHART	
Session	120 - 180 minutes
Training Day	1 - 3 sessions
Micro Cycle	3 - 7 training days (typically one week)
Meso Cycle	2 - 6 microcycles
Macro Cycle	multiple mesocycles (typically a year)
Olympic Cycle	4 macrocycles (quadrennial)

3.6 GENERAL PROCESS FOR DESIGNING A PROGRAM: *KEY STEPS*

The planning of an entire season can be daunting if considering the whole process. It is much easier to break down the major steps involved in the process.

A. Determine the general orientation of the program
B. Establish the structure of the program
C. Determine the training priorities, objectives, and methods of a given week of the program

3.6.1 A. DETERMINE THE GENERAL ORIENTATION OF THE PROGRAM

1. Determine the coaching context in which your program will be implemented. To do so, take into account variables such as your discipline, the age of your athletes, their training and competition background, and previous performances they have achieved.
2. Taking into consideration notions of growth and development, determine the major orientation that your program should have according to the LTAD
3. Using Canada Snowboard's LTAD, identify specific aspects that must be featured within your program from a technical, tactical, physical, and mental point of view.
4. Using Canada Snowboard's athlete assessment tool to make a general assessment of your athletes' strengths and weaknesses, given their age.

WORKING AROUND CHALLENGES

Programs in some provinces are not going to have the resources to meet the recommended LTAD ratios exactly. Coaches may need to think outside of the norm to give the athletes the opportunities they desire based on the resources you have. This may mean looking to other sports or traveling to reach training and competition ratio amounts.

3.6.2 B. ESTABLISH THE STRUCTURE OF THE PROGRAM

Visit www.canadasnowboard.ca for a sample YTP Template which can be used for this step in the planning process.

5. Make an inventory of the competitions in which you would like your athletes to compete throughout the season, and determine their relative importance (regular, important, exhibition, tournaments, playoffs, championship, etc.).
6. Make an inventory of the training opportunities available to you and to your athletes (number of practices or training sessions per week, duration of each session, facilities and equipment available).
7. Determine when the first official competition will take place. Enter this date on your program planning form; it will represent the beginning of the Competition Period of your program.
8. Determine when the last official competition will take place. Enter this date on your program planning form; it will represent the end of the Competition Period and the beginning of the Transition Period of your program.
9. Determine when the first formal training contact with your athletes will take place. Enter this date on your program planning form; it will represent the beginning of the Preparation Period and the end of the Transition Period of your program.
10. Identify the various events that will be featured in your program (training camps, regular competitions, important competitions, tournaments, championships, selections or trials, fundraising activities, social events, etc.), and specify their relative importance. Indicate the date of these events on your program planning form **(visit website for template)**

3.6.4 C. DETERMINE THE TRAINING PRIORITIES, OBJECTIVES AND METHODS OF A WEEK

11. Review the importance of physical and motor abilities for sliding sports below (Coaches of Canada, 2008).

PHYSICAL AND MOTOR ABILITIES FOR SLIDING SPORTS

SPORT FAMILY	PHYSICAL ABILITIES							MOTOR ABILITIES	
	Speed	Speed Endurance	Aerobic Stamina	Maximum Strength	Speed Strength	Strength Endurance	Flexibility	Coordination	Balance
Sliding Sports Alpine Skiing Snowboarding Water Skiing *Bobsleigh	**Moderate to high** *Very high	**Moderate to high** *Moderate	**Moderate** *Low	**Moderate to high** *High to very high	**High to very high** *Very high	**High to very high** *Moderate high	**High** *Moderate to high	**Very high** *High to very high	**Very high**

Table Notes:
1. *, **, and # indicate that more or one abilities for the sport in question do not have the same importance they have in the sport family.
2. Agility is not included as a separate athletic abilitity because it develops through skill development or inherently through the training of the other athletic abilities

12. Choose a week of your program.
13. Using the code based on lines of varying thicknesses, identify the most important athletic abilities (maximum of 5) to train in this particular week.

Sample Sport Program, Comp Intro, Speed-Power Sports

The training emphasis given to a specific athletic ability is shown by the thickness of the band:

High **Moderate** **Low**

The training objective for a specific athletic ability is shown by the thickness of the band:

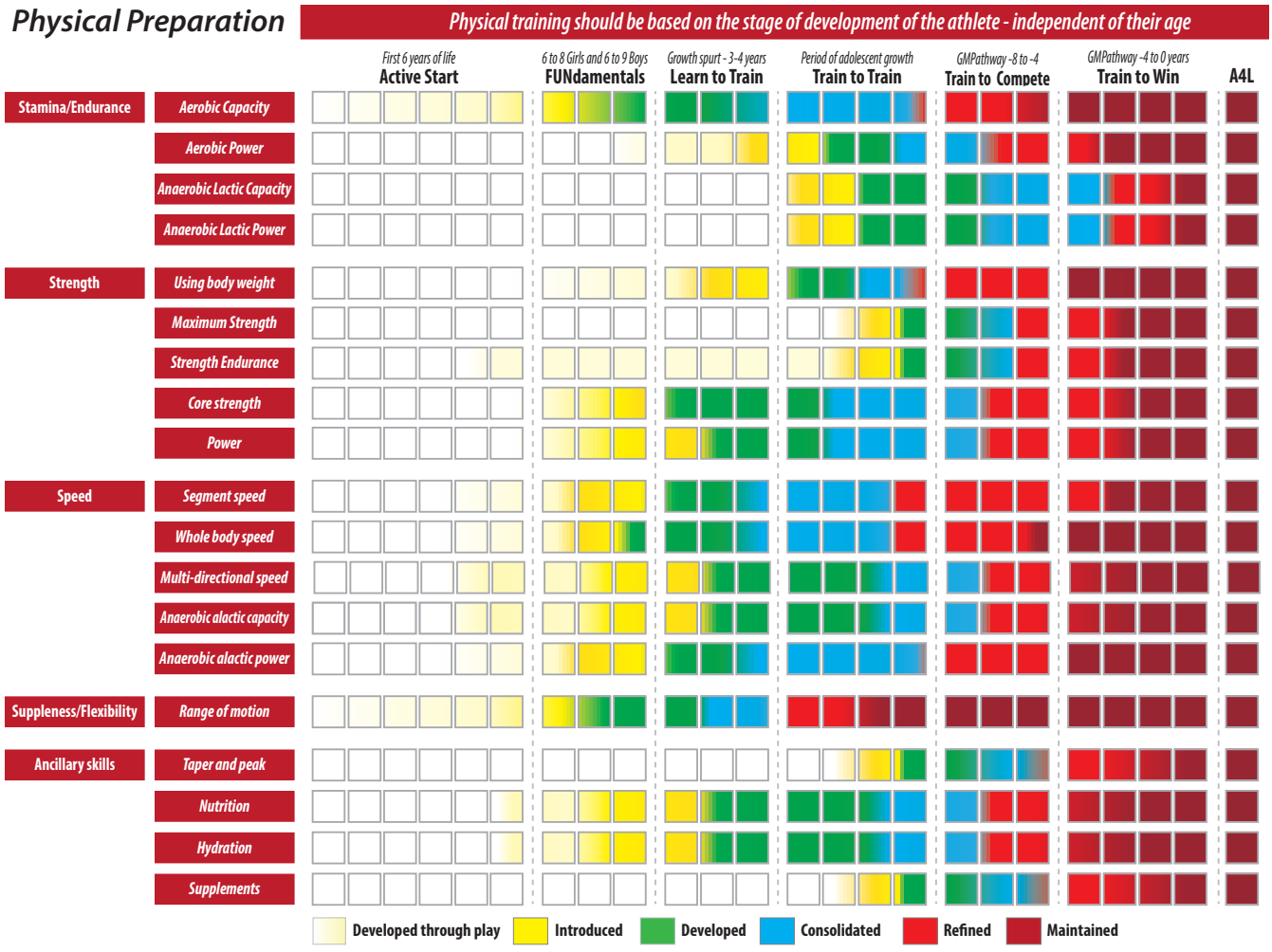
Black **Dark Grey** **Light Grey**

Acquisition (technical or tactical elements) or **development** (physical or motor abilities)	**Consolidation** (technical or tactical elements) or **maintenance** (physical or motor abilities)	**Refinement** (technical or tactical elements)

14. Using the colour code, identify the training objectives associated with each of the athletic abilities you have selected.
15. Ask your athletes to validate these objectives to ensure they match their skills, interests, and motivations.
16. For each combination of athletic ability – objective, identify appropriate types of exercises that could be used during practices (for all athletic abilities) and practice conditions (for sport-specific technical and tactical elements only).
17. For each athletic ability you have identified, and bearing in mind the desired objective, determine the number of training sessions needed per week and the amount of time that must be planned for training during each practice.

    Note: You may choose to spend more time than the "minimum recommended time for training a particular athletic ability; however, you should not devote less time than recommended if you really want to achieve the desired training effect.

18. Add up all the training time required. This represents the amount of time you should devote to training in the week you have chosen.



19. To determine if the total time obtained in Step 18 is realistic for your training situation, add up the number of practice sessions that you can have during the week and the length of the main part of each session. This figure represents the actual training time available to train the various athletic abilities in the week you have chosen.
20. Determine the gap between the time required in the ideal situation (Step 18) and the actual time available for training in the week you have chosen (Step 19).
21. If the gap in time is significant, consider the following questions when you come to decide which athletic abilities to prioritize:
22. Can the athletes train certain athletic abilities individually, outside your practice sessions, or before or after the sessions?
23. Is it possible to combine the training of certain athletic abilities in your sessions?
24. Which athletic abilities are the most important according to the sample program of your family of sports?
25. Bearing in mind the training time available (Step 19) and the reflection you did in Steps 20 + 21, lay out the training priorities and content in the different practice sessions of the week. Use the Planning a Practice Session Worksheet and, for each session, specify the following information:
    a. The athletic abilities to be worked on
    b. The training objectives
    c. The practice conditions and types of activities that are appropriate
    d. The training methods and the time devoted to training each athletic ability
26. Once you have this information, you should be able to put together the main part of each of your practice sessions using the process presented in the NCCP module Planning a Practice.
27. Repeat these steps for each week in the season, taking time to review the macro-cycles to ensure there is appropriate time for development and consolidation.

Refer to the LTAD Stage 4: Train to train information in this manual's appendix for further training recommendations.

	FOCUS	LEADERS	TECHNICAL	PROGRAMS	COMPETITION	WINTER ENVIRONMENT	SUMMER ENVIRONMENT
01 ACTIVE START AGES 0-6	Learn to snowboard + Master basic movements	Community Programs + Snow school at local mountain + Riglet Snowboarding	Learn to snowboard	CASI Quick Ride + Community Recreation Programs	Participation based games - Learn the rules!	Daily physical activity, combined with structured sport programs. Example: Gymnastics, swimming etc.	Daily physical activity, combined with structured sport programs. Example: Gymnastics, swimming etc.
02 FUNdamentals AGES 6-9	Learn to snowboard	Snow School (with a certified instructor)	Learn to snowboard. Linking turns and riding regular/goofy + switch	CASI Quick Ride + RIDERS Program	Participation based games - Learn the rules!	Learning how to snowboard in a fun environment + Well structured sport programs emphasized on fun	Well structured sport programs emphasized on fun and general athletic development
03 LEARN TO RIDE AGES 8-12	Fundamental Snowboard Skill Development Multi-Discipline focus	Comp Intro Certified Coach	Carving on blue terrain and ride all medium features in terrain park, track and halfpipe	RIDERS Program	RIDERS Event Series	Snowboard Training 3 times a week *(multi discipline)* + Continued participation in other sports	3 days training per week in another sport
04 TRAIN TO TRAIN AGES 12+	Speed or Style? Develop technical skills and increase competition	Advanced Certified Coach	Discipline specific skill development + Balance between technical freeriding and training	Snowboard Ontario Sanctioned Club	Provincial Series 3 - 5 events per season (Jan - Mar)	Snowboard or complementary sport training 6 - 9 times per week. High volume and repetition in quality environment.	Training 6 - 9 times a week in a summer sport or activity. + Acrobatic and gymnastic training
05 TRAIN TO COMPETE AGES 14-16+	Physical and Technical Refinement + Tactical and Psychological Development	Comp Development Certified Coach	Increased volume of training in competitive environment, refining skills and pushing limits safely	Provincial and National Elite Clubs + Canada Snowboard's Next Gen Program	Air Nation and Speed Nation Tour (5-8 events / season)	Dedicated training on snow 9-10 months of year	Access to high quality off snow training Acrobatic, gymnastic, fitness
06 LEARN TO WIN AGES 17-18+	Technical, Tactical and Psychological Refinement	Comp Development and Comp Development Advanced Certified Coach	Refinement of current skills and combinations required to qualify for Elite events and podium for International events	National Elite Clubs + Canada Snowboard's Next Gen & National Team Program	International Level Events: World Cups, etc. (8-10 per season)	Majority of time spent in high quality parks, training camps all around the world.	Acrobatic and fitness training high priority
07 TRAIN TO WIN 18+	Holistic perfection of all KPI's	Competition High Performance Coach	Refinement and perfection of skills and combinations required to qualify for finals and podium at elite level events	Canada Snowboard's High Performance Program	Elite and International Tour: Olympics, Paralympics, World Championships, X Games, etc. (8-10 per season)	Following Elite Tour with select international events + training camps in best locations worldwide.	Acrobatic and fitness training high priority
08 ACTIVE FOR LIFE ANY AGE	Staying active and involved in the sport	Become a coach, instructor, judge or volunteer	Stay healthy and have fun!	Masters Program	Banked Slalom	Get on snow as much as you can!	Participating in multiple sports and having fun at the lake!

THE CANADIAN SNOWBOARD PATHWAY TO PODIUM

4. PLAN A SESSION

4.1 INTRODUCTION

Once an athlete's training and competitive objectives for a season have been decided upon, it is necessary to layout the smaller steps that the coach will follow. Just like following a map to your destination, each session contributes to reaching the goal.

COACH OUTCOMES AND CRITERIA

Outcome: Plan a Session (NB: This outcome is OPTIONAL for this context. If training this outcome, the evidence marked with a T must be trained. If evaluating, the evidence marked with an E must be trained and evaluated to meet the minimum standard for this outcome).

CRITERION: IDENTIFY APPROPRIATE LOGISTICS FOR SESSION
EVIDENCE
Identify athletes' age, abilities and performance levels.
Clearly identify a practice goal that is consistent with the sport's long-term athlete development / Canadian Sport 4 Life principles and the level of the athletes.
Identify main segments of the practice: intro, warm-up, main part, cool-down and conclusion or reflection.
Outline facilities and equipment required to achieve practice goal
Provide a timeline for the activities
Identify potential risk factors (environmental, mechanical)
Identify the location of practice in the seasonal plan
Provide an appropriate rationale for chosen practice goals

CRITERION: IDENTIFY APPROPRIATE ACTIVITIES IN EACH PART OF THE PRACTICE		
EVIDENCE		Training(T) Evaluation(E)
B	Describe planned activities through illustration, diagram, and explanation	TE
A	Indicate key factors (coaching points) that will be identified in the practice activities	TE
A	Identify duration of overall practice and each practice segment and ensure consistency with the sport's long-term athlete development / Canadian Sport for Life principles	TE
B	Ensure activities are purposeful and linked to overall practice goal (purposeful means that the activities match the sport's long-term athlete development / Canadian Sport for Life principles)	TE
A	Ensure activities reflect awareness and control for potential risk factors	TE
A	Ensure activities contribute to the development of skill(s) and are appropriate to the stage of skill development (Acquisition, Consolidation, Refinement)	TE
A	Ensure activities contribute to the development of athletic abilities (as outlined in the sport's long-term athlete development / Canadian Sport for Life principles)	TE
☐	Include variations of activities or practice conditions that can be used to create specific challenges to elicit a particular training effect	Optional
☐	Include activities that promote basic concepts of decision training	Optional
☐	Select activities that are appropriate to the time and location in seasonal plan	Optional
☐	Sequence activities appropriately in the main part to promote learning, skill development and to induce desired training effects	Optional
☐	Include variations of activities or practice conditions that can be used to create specific challenges to elicit a particular training effect	Optional
☐	Include activities that promote basic concepts of decision training	Optional
A	Select activities that are appropriate to the time and location in seasonal plan	Optional
A	Sequence activities appropriately in the main part to promote learning, skill development and to induce desired training effects	Optional

CRITERION: DESIGN AN EMERGENCY PLAN
EVIDENCE
Identify location of telephones (cell and land lines)
List emergency telephone numbers
Identify location of medical profiles for each participant under the coach's care
Identify location of fully-stocked first aid kit
Designate advance "call person" and "charge person"
Provide directions to reach the activity site

4.2 PRINCIPLES OF LEARNING

Less Talk, More Riding
Your athletes are only going to process and learn some of what you tell them during an explanation. Giving them ample opportunity to put the teaching into their riding, will help ensure they remember it.

Don't Overload
Athletes are not going to successfully learn to master multiple skills at the same time. Concentrate on coaching and giving feedback on one skill until they are successful, before moving to another.

4.2.1 TYPES OF LEARNERS

There are different styles of learners. Maximize your coach effectiveness by using a mix of demonstration and explanation to ensure each athlete understands your message.

Kinesthetic
Learns well by doing through the execution of motor skills and techniques.

Characteristics: Likes to try things, often fails attempts, learns from mistakes.
Coaching: Encourage repetition, provide opportunity to 'do'.

Cognitive
Learns through the acquisition of knowledge be it technical, tactical or strategic.

Characteristics: Absorbs information, plans well but often over analysis.
Coaching: Analyze and offer feedback, offer additional reading information in an area.

Visual
Learns through watching a skill or technique and imitating.

Characteristics: Needs solid demonstrations to improve.
Coaching: Ensure adequate demonstration, encourage trying.

Photo: Francois Carpentier

4.2.2 CREATING A POSITIVE LEARNING ENVIRONMENT

THE SEVEN GENERAL PRINCIPLES

1. Interact equally with all participants/athletes
Feedback from the coach is intended to inform and encourage athletes and coaches should divide their time equally amongst all the athletes.

2. Ensure that participants/athletes are actively involved
Too long a time spent organizing the group and the equipment, and similarly long periods of inactivity during the practices may lead to loss of interest by the participants/athletes and lead to a lack of discipline.

3. Adapt the degree of difficulty of the practices to the abilities of the participants
Practices must involve tasks that create a degree of uncertainty in the participants/athletes, i.e. they must have the impression, but not be absolutely certain, that they are able to execute the task correctly. This kind of task presents them with an interesting challenge.

4. Define what successful performance looks like
Without clear objectives to achieve and when they do not know how they are doing, participants/athletes live in a climate of uncertainty and ambiguity which may promote dependency on the coach, or loss of interest in the activity.

5. Give specific and constructive feedback
Coaches must give specific information that will lead the participants/athletes to think. It is better to avoid sharp criticism, as it is well known that this can have a negative influence on learning and the development of the person.

6. Do not allow a few participants to monopolize attention
It is important to recognize that certain participants/athletes condition the coach to react the way they want, and end up expecting all the coach's attention. Add to this phenomenon the fact that every coach likes some participants/athletes more than others, and it is not surprising to discover that other people feel left out and badly treated when this occurs.

7. Improve the scope of feedback
When coaches give feedback to participants/athletes, they often use stereotypical messages, which often become repetitive and little more than habitual statements. Sometimes you need not give any feedback. The quality and credibility of the feedback are more important than the quantity.

4.3 FACTORS TO CONSIDER WHEN PLANNING

4.4 THE STRUCTURE OF A SESSION

- Average duration of sessions for a L2R athlete: 90 to 120 min
- Average duration of sessions for a T2T to T2C athlete: 120 to 180 min
- A well-structured session has 6 parts: The intro, the warm-up, the main part, the cool down, the conclusion and the reflection.

THE SIX PARTS OF A SNOWBOARD SESSION:

1. THE INTRODUCTION

The coach prepares the site and equipment, welcomes the athletes, and informs them of today's goals:

A. What: are we training? B. When: how long will the session last?
C. Where: where are we riding? D. Why: Goal of the day's session or sessions?

This is also a good time to assess the general status of the athletes (e.g. Have they recovered from the previous session?) and on the general status of their equipment.

2. THE WARM-UP

The warm-up is an important part of any session. It not only warms up the body, but sets the "mood" for the entire session and enables the coach to further determine what state the riders are in, and in what direction the session should go.

The warm-up consists of two parts:

A. ***General: A Dynamic Warm up which aims to raise the body temperature to allow for progressive muscle stretching. Can be done before or after the first run of the day.***

1. Dynamic one-foot balance: Hold this position for 30 seconds per leg.
2. Walking Lunges: Begin with 8 repetitions on each leg
3. Side Lunges: Begin with 8 repetitions in each direction
4. Walking Deadlifts: Start with 6 repetitions on each leg.
5. I, T, Y, W: Begin with the formation of each letter 3 times with arms.
6. Push Ups: Begin by completing 8 repetitions.
7. Dynamic Plank: Go through the series of planks 3 times.
8. Supine Bridge: Hold this position for 30 seconds.
9. Zig Zag Run: Repeat the pylon course (10 pylons) 5 times.
10. Side Jumps over a line: Begin with 8 hops in each direction.
11. Bounding: Begin with 8 hops in each direction and increase the number over time.

B. ***Specific: Designed for the particular snowboard movements, gradually building in intensity and range of motion.***

Specific suggestions:

- A couple of freeride runs using excessive movements of larger muscles and joints
- Using drill that will reinforce the goal of the session.

3. THE MAIN PART

The Main Part is the piece of the training session that provides the technical activities based on the sessions goals. The coach ensures a smooth flow of activities that are challenging for the athletes, and that help them to improve snowboard specific abilities and fitness. The activities chosen must be not only appropriate for the sport, but also for the athletes' age, fitness, and ability levels.

Organizing Activities

- Always think about how to begin and finish an activity or a drill.
- Always take into account the safety issues of the activity or drill.
- Organize the activity in a way that allows each athlete to remain active during at least 50% of practice time.
- Organize the activity in a way that enables athletes to progress at their own pace.
- Set up the environment in such a way as to allow yourself to move around and see every athlete without interfering.
- Ensure each athlete has the maximum possible amount of practice time (number of repetitions)
- Always plan for the equipment that will be used during the activity or the drill, prepare them ahead of time and make sure they are available at the time of the activity.

01 ORGANIZATION

- Includes safety measures and how the activity starts and finishes
- Requires at least 50% motor involvement
- Coach is able to supervise

Can someone else do the demonstration better than me?

02 EXPLANATION/DEMONSTRATION

- Describe the aim of the exercise
- Outline what is to be done and how
- Describe points of reference/ cues
- Identify criteria of successful performance
- Touch the different communication channels (visual, kinesthetic, auditory)

03 OBSERVATION

- Ensure that the athletes are actively engaged and achieve a good rate of success
- To observe, move around without interfering with athletes
- Observe both individuals and the group
- Verify if success criteria are achieved

Did I give the athletes enough time to practice before stopping them to give feedback?

04 FEEDBACK

- Identify the cause of failure
- Adept the activity as needed
- Help athletes by reassuring them
- Explain and demonstrate again if necessary
- Recognize successful performance

05 EFFECTS OF FEEDBACK

- Give the athlete time to practice again to check whether they have acted on the feedback

Did I remember to ask the athletes to give me feedback before giving them mine?

4. THE COOL-DOWN

The goal of the Cool Down is to initiate the recovery of the body through low-intensity transition activities between the more intense efforts of the main part and the end of the session.
Following the Main Part of the session, a 5-10 min cool-down is effective to: stretch muscles (reduce stiffness and increase flexibility), bring heart rate down (riders will finish more relaxed and parents love this), session closure (coach can go over the session, reinforcing certain areas and review key points).

Plan for some time to Stretch. Static stretching (slowly stretching a muscle while not moving) is used during a cool down (ex. Standing quad stretch).

5. THE CONCLUSION

An opportunity for the coach to provide some comments on the session as well as an opportunity for feedback from riders. Information about the next session or competition is also provided.
The coach ensures the session ends on a positive and constructive note.
Plan for some time to re-fuel.

Liquids and food high in carbohydrate within 60 minutes, will shorten recovery time.

6. REFLECTION

The coaches' opportunity to reflect on the session and look to always make the next session better and more effective.

A. Identify athletes' age, abilities and performance levels.

The Athlete Audit is a useful tool that a coach should employ with new and returning athletes at the beginning of every season (and maybe the end). At the CIA coach level, it is used to quantify benchmarks for all aspects of an athlete's development. It is based on the Key Performance Indicators (KPI's), which are then compared to established norms for that stage of athlete.

Currently, it is hard to find well-established norms or benchmarks, although, as this practice becomes more common, the amount of available information will become easier to find. To start, consider the habits or characteristics of top performers of similar age, gender and experience. As you gain more experience with the tool, trends will begin to appear.

For a detailed example/template of an Athlete Audit, visit www.canadasnowboard.ca › Coaching › Documents.

B. Athlete Goal Setting

"Excuse me, Sir," Alice inquires. "Could you tell me which road to take?" Wisely, the caterpillar asks, "Where are you going?" Somewhat dismayed, Alice responds, "Oh, I don't know where I am going, Sir." "Well," replied the caterpillar, "if you don't know where you are going, it really doesn't matter which road you take." (Alice in Wonderland – Lewis Carrol)

Goal setting involves establishing specific, measurable and time-targeted objectives. Goals need to be purposeful and attainable to assist an athlete in moving forward in their development. Athletes should be taught to set basic goals as soon as they enter a training program. Goals assist athletes by giving them a roadmap and setting benchmarks that they will work towards throughout the program. Athletes at this stage should be focusing on process goals as it can be controlled, i.e. Landing their halfpipe run rather than finishing in the top five (which depends on how other athletes perform). Depending on the program intensity and level of preparedness of the athlete, goal setting can be completed pre-season, during the season with regular reviews and revisions throughout and a final debrief at the conclusion of the season when needed.

Sample of goal setting areas that could be completed by a T2T level athlete:

- Long Term Goals (3 to 6 years down the road).
- Individual season goal (the big thing the athlete wants to achieve this year)
  - Skills needed to reach this goal.
  - Steps to take to reach these skills.
- Intermediate goal (where you want to be mid-season).
- Short Term Goals (choose an upcoming single competition/event).
  - What can be done in the next training session to work towards this.
- Technical Skill goals (i.e. List three technical skills you'd like to learn or perfect this season).

Goals should be set and reviewed on a regular basis both in training and competition. Coaches should assist athletes to ensure goals are relevant, achievable and appropriate for the time of season. Goal setting can be done formally (written) or informally as a conversation with each athlete. Goals will directly influence the design of the session plan.

See **APPENDIX B** for more information about goal setting with athletes.

C. Training Environment

The quality and variety of training available for athletes will largely be dictated by the quality and variety of the training facilities and environmental conditions. The characteristics of the facilities must be taken into account when deciding on the goals of the session, or vice versa. Decide what training environment/facilities are required to achieve the training goals. Being knowledgeable of your training outcomes will be extremely helpful to create the best opportunities for high quality training.

The NCCP Facility Inspection Grid (**APPENDIX F**) is meant to help coaches identify the gaps between the ideal and the actual conditions of the training facility. This can be expanded to include an evaluation of on snow amenities (park, groomers, lane space), lodge (video analysis area, food, lockers) and equipment (gates, park tools) or anything else that will affect the quality of the training environment.

D. Additional Session Logistics

Session planning for the Competition Introduction Advanced coach should include more detail than the Comp Intro coach session plans. There are several benefits to including more details in your session plans, including:

- Easier to communicate session details to others (athletes/assistant coaches etc.)
- Easier for the coach to stay on track with the session (less talking etc…)
- Helps to identify potential risks during the session
- Solidifies the rational for the session goals
- Allows for deeper analysis of session during the reflection process

Also consider some of these points when determining the logistics of your sessions:

- Consult the LTAD for the frequency of sessions in the season/macrocycle/microcycle/session
- Provide a timeline for each activity in the session
- Identify potential risks factors (environmental, mechanical) for coaches and athletes
- Identify the location of the session within the seasonal training plan
- Provide an appropriate rationale for the goals of the session
  - Early season: Focus on skill development by recognizing the individual needs of each athlete; the early season is the opportunity to build a strong base.
  - Mid Season: Implementing skills into competition or training scenarios and consolidating goals of the athlete to achieve initial successes.
  - End of Season: Refining skills taught throughout the season and implementing them into competition scenarios.

4.5 DESIGNING SESSION ACTIVITIES

From the seasonal training plan and the athlete audit, the Comp Intro Advanced coach will be able to identify goals for each microcycle (three to seven days), and translate that into goals for each session. While creating the session plan, the key coaching points for the session should be identified. Keep the goals specific, measurable and achievable to have the greatest effect in each session. By reflecting on the session and the athletes' accomplishment of set goals, the coach will be able to strategize and plan for the next session.

5 CRITERIA TO DEVELOP CHALLENGING ACTIVITIES THAT MOTIVATE ATHLETES TO LEARN

MOTIVATING ACTIVITY:
Activity that the athletes really want to have a go at, right from the start.

01 ORIGINALITY
NEED TO DISCOVER
- Novelty
- Need to be surprised
- Desire to try

02 AFFECTIVE COMPONENT
NEED TO BE CHALLENGED
Overcoming a reasonable challenge.

03 MEANING
NEED TO UNDERSTAND
Establishing linkages with the objectives outlined for the activity (congruence).

04 OPENNESS
NEED FOR TRUST
Achieve something right from the beginning, then progress (individualization).

05 DYNAMIC
NEED FOR MOVEMENT
Involving all motor functions (intensity, duration, active engagement).

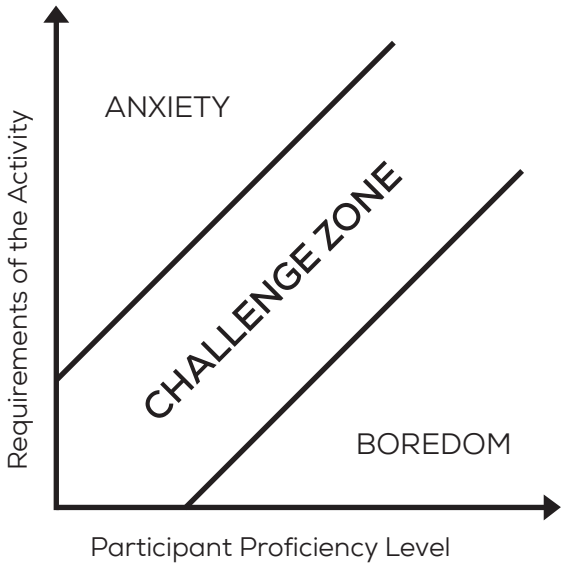
PRINCIPLE: An activity does not necessarily have to feature all criteria simultaneously to be considered ''motivating''; rather, the coach must decide which of these criteria should apply in a given situation in order to generate an optimal level of interest in the athletes.

THE CHALLENGE ZONE

When planning a session consider the challenge zone. The challenge zone is a balance between anxiety and boredom. Give athletes a reasonable chance of succession and failure with the activity.

AVOID:
- Boredom, lack of interest, lack of focus
- Frustration, anxiety, discouragement

AIM for activities that:
- Represent a challenge
- Give athletes a reasonable chance of either success or failure
- Enhanced feeling of accomplishment when successful



4.6 SKILL DEVELOPMENT

- When learning a skill, athletes progress through some predictable stages. The table on the following page outlines some key concepts about the stages of skill development and the needs of athletes at each stage.
- While each athlete can be expected to go through each stage, the time and the amount of practice necessary to progress from one stage to the next can vary greatly from one athlete to another.
- The stages of skill development described in the following table (initiation, acquisition, consolidation, refinement, and creative variations) apply regardless of the type of skill or the way it is classified.
- It is important to recognize the stage of skill development your athletes are at, as well as the specific needs they have at each stage. It is also important to plan your practices accordingly (i.e. select the right types of activities and the appropriate way to run them).

Reminder:
It may take months or even years of practice for an athlete to reach the Refinement stage of skill development defined in the following table. Also, the vast majority of athletes will never reach the Creative Variations stage. Consequently, at the Introduction to Competition level, few coaches work with athletes who reach an advanced stage of skill execution. The focus should therefore be on ensuring the fundamentals are correct and that athletes can perform them in a variety of situations and conditions.

4.6.1 STAGES OF SKILL DEVELOPMENT

BEGINNER		INTERMEDIATE	ADVANCED	
Initiation	Acquisition	Consolidation	Refinement	Creative Variation
Key Points to look for...				
The first contact the athlete has with the skill. The athlete may have no idea of what to do to perform the skill.	The early stage of learning where the athlete becomes capable of (1) coordinating key components of movements and (2) executing them in the correct order, thus performing a rough form of the skill. The movements are not well synchronized or under control, and they lack rhythm and flow. The execution is inconsistent and lacks precision. The athlete has to think about what he or she is doing while performing the skill. Both form and performance tend to deteriorate markedly when the athlete tries to execute movements quickly or is under pressure, as may be the case in a competitive situation.	The athlete can execute the movements or the skill with correct form. Movement control, synchronization, and rhythm are good when performing the skill under easy and stable conditions. The movements can be repeated consistently and with precision under these conditions. Some elements of performance can be maintained when the athlete is under pressure, conditions change, or demands increase, but performance remains inconsistent. The athlete begins to develop a more personal style.	The athlete can execute the movements in a way that is very close to the ideal in terms of form and speed. The performance is very consistent and precision is high, even under very demanding conditions and in situations that are both complex and varied. Only minor fine-tuning may be necessary to achieve optimal execution, and a fairly personal style is established. All components of the movement have been automated, which enables the athlete to focus on the environment while performing and to make rapid adjustments as necessary. The athlete can reflect critically on his or her performance to make corrections.	The early stage of learning where the athlete becomes capable of (1) coordinating key components of movements and (2) executing them in the correct order, thus performing a rough form of the skill. The movements are not well synchronized or under control, and they lack rhythm and flow. The execution is inconsistent and lacks precision. The athlete has to think about what he or she is doing while performing the skill. Both form and performance tend to deteriorate markedly when the athlete tries to execute movements quickly or is under pressure, as may be the case in a competitive situation.
At this stage athletes need to...				
Have a clear mental image of what correct execution looks like. Understand the fundamental positions, stances, and patterns of the sport or skill. Feel safe when performing the skill. Reach a comfort level with some movements or feelings that may be unfamiliar and that are part of the skill to be learned.	Have a clear mental image of what correct execution looks like. Understand the fundamental positions, stances, and patterns of the sport or skill. Feel safe when performing the skill. Reach a comfort level with some movements or feelings that may be unfamiliar and that are part of the skill to be learned.	Have a clear mental image of what correct execution looks like. Understand the fundamental positions, stances, and patterns of the sport or skill. Feel safe when performing the skill. Reach a comfort level with some movements or feelings that may be unfamiliar and that are part of the skill to be learned.	Be exposed to complex or demanding competitive situations that require the skill to be executed at a very high level. Learn how to solve problems they encounter.	Be exposed to complex or demanding competitive situations that require the skill to be executed perfectly. Develop their own solutions.

4.6.2 PLANNING GUIDELINES FOR SKILL DEVELOPMENT

As the table on the previous page shows, the needs of athletes differ depending on the stage of skill development they are at. Athletes' needs should guide the goals you have for practices that aim at developing skills.

For practices that aim at developing skills, you should ensure that the goals, as well as the activities in which the athletes are involved, are adapted to the needs of the athletes and that the conditions in which these activities take place also match the athletes' capabilities. Selecting or designing appropriate activities and identifying suitable conditions in which they take place are therefore critical steps in planning your practice.

You will likely have to allow for the fact that not all athletes are at the same stage of skill development. This can be dealt with by planning different activities for different groups of athletes or adapting practice conditions to different athletes' needs.

You can plan the activities and tasks that athletes will do during a practice in many different ways. Athletes can perform (1) the whole skill, or only parts of it, (2) many repetitions without rest, or rest for varying amounts of time in between repetitions, or (3) the same task several times in a row, or distinct movements or actions each time either in a predictable order or in random order.

The most effective activities/tasks, types of practice, or practice conditions may also vary with the skill to be learned (open, closed, discrete, serial, or continuous) or the stage of skill development the athletes are at. Additional adjustments may be necessary to take into consideration the age of the athletes.

Planning guidelines for activities and practice conditions that support skill development at various stages are proposed in the following pages.

Reminder:
Canada Snowboard's LTAD specifies what technical and tactical abilities to train, as well as the priority in which they should be trained at various ages and levels of competition

Photo: Illanna Barkusky

4.6.3 ACTIVITY PLANNING GUIDELINES FOR VARIOUS STAGES OF SKILL DEVELOPMENT

TYPE OF PRACTICE	DEFINITION	EXAMPLES	MOST EFFECTIVE FOR WHEN...	NOT RECOMMENDED FOR WHEN...
Constant Practice	A practice sequence in which the same tasks or movements are repeated under the same conditions from one repetition to another.	Repeating starts (SBX or PGS) or repeating a single freestyle skill (ie. Boardslides on the same rail multiple times).	The athlete is in the initiation or acquisition stage of skill development. Massed practice is an effective method.	The athlete is beyond the initiation or acquisition stages of skill development, in particular, for discrete or open skills.
Variable Practice	A practice sequence in which the same tasks or movements are repeated but where one aspect of the execution is changed from one repetition to another.	Varying the 'situation' the athlete is in each run (alone vs. 2 riders in an SBX track), varying focus in a slopestyle or halfpipe run (amplitude, grabs, etc.).	The athlete is in the consolidation stage of skill development, Massed practice is an effective method. Distinct skills or movements are performed during the same practice.	The athlete is in the initiation stage of skill development.
Random Practice	A practice schedule in which various discrete or serial skills that are required for performance in the sport are practiced in random order, and where the learner does not practice the same task on two consecutive attempts.	Working on a variety of skills in a run using drills (Ex. Generating lift – ollie's, nollie's, hoping between turns, varying terrain – all in one run).	Serial skills that are already acquired. Skills that are both discrete and open. The athlete is in the consolidation stage of skill development, or is beyond this stage. When distinct skills or movements are scheduled to be performed during the same practice.	The athlete is in the initiation or acquisition stage of skill development.

4.6.4 ACTIVITY PLANNING GUIDELINES FOR PART, PROGRESSIVE PART OR WHOLE PRACTICE

TYPE OF PRACTICE	DEFINITION	EXAMPLES	MOST EFFECTIVE FOR WHEN...	NOT RECOMMENDED FOR WHEN...
Constant Practice	A practice sequence in which the same tasks or movements are repeated under the same conditions from one repetition to another.	Repeating starts (SBX or PGS) or repeating a single freestyle skill (ie. Boardslides on the same rail multiple times).	The athlete is in the initiation or acquisition stage of skill development. Massed practice is an effective method.	The athlete is beyond the initiation or acquisition stages of skill development, in particular, for discrete or open skills.
Variable Practice	A practice sequence in which the same tasks or movements are repeated but where one aspect of the execution is changed from one repetition to another.	Varying the 'situation' the athlete is in each run (alone vs. 2 riders in an SBX track), varying focus in a slopestyle or halfpipe run (amplitude, grabs, etc.).	The athlete is in the consolidation stage of skill development, Massed practice is an effective method. Distinct skills or movements are performed during the same practice.	The athlete is in the initiation stage of skill development.
Random Practice	A practice schedule in which various discrete or serial skills that are required for performance in the sport are practiced in random order, and where the learner does not practice the same task on two consecutive attempts.	Working on a variety of skills in a run using drills (Ex. Generating lift – ollie's, nollie's, hoping between turns, varying terrain – all in one run).	Serial skills that are already acquired. Skills that are both discrete and open. The athlete is in the consolidation stage of skill development, or is beyond this stage. When distinct skills or movements are scheduled to be performed during the same practice.	The athlete is in the initiation or acquisition stage of skill development.

* There is strong evidence that random practice, while sometimes associated with inferior performance in the short term, results in superior performance in the long term. In other words, when constant practice is used to learn a skill or task, the performance during the session is often better compared to random practice, but the latter promotes better skill retention and overall performance in the long run. This suggests that random practice may be a very effective approach for both discrete and serial skills, as well as for open skills. The reasons for this may be that random practice causes athletes to forget short-term solutions to the task at hand; this could engage them actively in the learning process, by eliminating automatic repetitions

4.6.5 ACTIVITY PLANNING GUIDELINES FOR MASSED OR DISTRIBUTED PRACTICE

TYPE OF PRACTICE	DEFINITION	EXAMPLES	MOST EFFECTIVE FOR WHEN...	NOT RECOMMENDED FOR WHEN...
Massed Practice	An approach to practice in which a given task or movement is repeated many times in a row without pauses or rest. OR where the pauses or the rest between each repetition are short compared to the duration of the actual task or movement itself.	In snowboarding, in one run, hopping throughout the turn while maintaining an average speed. Punching a bag for 3 minutes.	- Discrete skills or tasks that are very short (and where movements are therefore performed rapidly), in particular during the acquisition phase *(Note: in some cases, such as throwing, some rest between repetitions may be necessary to avoid injuries).* - During the acquisition and consolidation stages of skill development. - The duration of the practice is set (e.g. facility is available for one hour) and lots of repetitions are needed - The energy requirements of the task are not too high. - The activity or the task performed poses little risk.	Continuous or serial skills or tasks that require a lot of speed or coordination and where fatigue can build up and affect the quality of execution. Fatigue developing during the session increases the risk of accident or injury, particularly toward the end of the practice.
Distributed Practice	An approach to practice in which the pauses or the rest following each repetition of a task or movement are long compared to the duration of the actual task or movement itself.	In track and field, practicing an all-out start from the blocks over 10 or 15 meters 5 times, with a one-minute recovery consisting of light jogging and walking between each repetition.	Continuous or serial skills or tasks that require a lot of speed or coordination, and where fatigue can build up and affect the quality of execution or increase the risk of accident or injury.	

4.6.6 IMPORTANT NOTES

PERFORMANCE VERSUS LEARNING

- Motor performance refers to the athlete's behaviour when executing a task, as determined by qualitative or quantitative assessments.
- Learning refers to the permanent change in motor performance (or skill) that occurs as a result of practice.
- A reassessment of motor performance at a later date is necessary to determine if a skill has been learned.
- Failure to appreciate the difference between performance and learning can lead to a misinterpretation of an athlete's progress or actual ability to execute a task independently and consistently.
- It is important to establish a distinction between how well a skill can be performed during a training session and how well the athlete performs when it counts, i.e. in competition.

RATE OF IMPROVEMENT AND AMOUNT OF PRACTICE

- Improvements in skill occur rapidly in early practice, but more slowly in later practice. Learning occurs in stages, with a different rate of improvement associated with each stage.
- The amount of practice is the single most important variable that leads to improvements in motor performance and the learning of skills.

SHORT- & LONG-TERM EFFECTS OF USING SPECIFIC PRACTICE CONDITIONS

- Both variable and random practice conditions have been shown to positively affect learning, to promote the ability to transfer skills into another environment, and to increase generalization because they challenge the athlete and promote effortful, problem-solving activities during movement repetitions.
- Repeating the same task many times under the same conditions (blocked practice) usually results in good performance improvements in the short term.
- Repeating different tasks under variable conditions (random practice) usually results in inferior performance improvements in the short term compared to blocked practice. However, it promotes greater learning in the medium to long term, as determined by retention and transfer tests.
- Coaches who incorporate a problem-solving approach to skill training by using random practice may need to educate athletes and their parents about the short- and longer term effects of this method compared to other approaches, such as blocked practice.

4.6.7 DESIGNING ACTIVITIES THAT DEVELOP ATHLETIC ABILITIES

DEFINITIONS AND KEY POINTS

To succeed in his or her sport, the athlete must have and seek to improve certain abilities that support performance. These athletic abilities (sometimes called performance factors) can be grouped into four general categories: physical, motor, technical/tactical, and mental.

CATEGORY	ATHLETIC ABILITIES REQUIRED IN MOST SPORTS
Physical abilities are determined by the rate at which energy and force can be produced by the muscles, and by the range through which the movements can be executed	**Speed:** The highest rate at which a movement or a series of movements can be executed, or the ability to cover a given distance in the shortest possible time during an all-out effort of very short duration (8 seconds or less). **Speed-Endurance**: The ability to sustain efforts at near-maximum speed for as long as possible (normally, very intense efforts lasting between 8 and 60 seconds). **Aerobic Stamina:** The ability to sustain a dynamic effort over an extended period of time (normally, efforts lasting several minutes or even hours). Note: Intense efforts lasting between 2 and 10 minutes require a subset of this athletic ability referred to as maximum aerobic power. (Aerobic stamina is a broad term that is sufficient for most sports. In endurance sports, however, the more specific terms aerobic power and aerobic endurance are used.) **Maximum Strength:** The highest level of tension generated by a muscle or muscle group during a maximum contraction, regardless of the duration of the contraction. **Speed-Strength:** The ability to perform a muscle contraction or overcome a resistance as fast as possible (normally, very brief efforts of 1-2 seconds). **Strength-Endurance:** The ability to perform repeated muscle contractions at intensities below maximum strength (normally, 15-30 repetitions or more). **Flexibility**: The ability to perform movements of large amplitude about a joint without sustaining injury.
Motor abilities support the controlled execution of movements	**Agility:** The ability to execute movements or to move rapidly, with precision, and with ease. **Balance**: The ability to achieve and maintain stability. There are three types of balance: (1) static balance: adopting a controlled body position in a stable environment; (2) dynamic balance: maintaining control during movement or stabilizing the body by performing muscular contractions to offset the effect of an external force; and (3) the ability to **keep an object or another body under control** in either a static or dynamic manner. **Coordination**: The ability to perform movements in the correct order, and with the right timing.
Tactical abilities support effective decisions	The ability to analyze a situation and produce a correct response, i.e. one that gives a competitive advantage or increases the probability of a good performance (**read and react**). It is also the ability to read cues from your opponents and your environment and to select the best response option (**associative solutions**), to develop an **inventory of responses** in order to face the same situation and to be able to **vary the response** when facing a similar but slightly different situation.
Mental skills enable the athlete to be in the proper state of mind to perform successfully	**Attentional Control**: The ability to pay attention to what is important in a given situation and avoid negative influences or distractions. **Emotional Control:** The ability to consciously maintain a high level of control over one's feelings when in stressful conditions. **Goal Setting:** The ability to identify clear goals and priorities that will guide future actions and decisions.

4.6.8 SUMMARY OF KEY POINTS FOR DEVELOPING ATHLETIC ABILITIES

ATHLETIC ABILITY	ACTIVITY REQUIRED
SPEED	Movements or actions performed at maximal speed or near maximal speed AND Movements or actions identical to those in which speed improvement is sought AND Efforts of short duration, i.e. less than 5 to 8 seconds AND Long recovery between efforts, i.e. 8 to 10 times longer than the effort itself. **Note 1:** Training no longer effective when intensity or quality of execution decreases. **Note 2:** Total time for all repetitions = 30 seconds to 2 minutes.
SPEED ENDURANCE	Movements or actions performed at near maximal speed AND Movements or actions identical to those in which speed-endurance improvement is sought AND Efforts between 8 and 60 seconds AND Recovery between efforts 6 to 8 times longer than effort. **Note:** Total time for all repetitions = 2 to 6 minutes.
AEROBIC STAMINA	Repeated high-intensity dynamic efforts performed without interruption for more than 2 or 3 minutes each OR High-intensity steady-state efforts performed for 10-15 minutes or more OR Moderate-intensity steady-state efforts performed for 30 minutes or more OR High-intensity intermittent efforts of 15 seconds to 2-3 minutes, followed by pauses of equal or shorter duration, for 20 to 30 minutes or more. **Note:** The more intense the efforts, the greater the training effect on maximum aerobic power.
MAXIMUM STRENGHT	Note: In many cases, the sport itself does not provide good opportunities to develop this athletic ability; see detailed guidelines.
SPEED STRENGHT	Movements or actions that require jumping, bounding, or quick pushing OR Movements or actions that require accelerating objects as quickly as possible.
STRENGHT ENDURANCE	Repeated muscle contractions that are sustained for several seconds OR Several sub-maximal muscle contractions performed consecutively at a constant rate.
FLEXIBILITY	Controlled movements of large amplitude OR Controlled movements in which the muscles are stretched and where the position is maintained for 20 to 40 seconds **Note:** No external force should be exerted on the limb or the articulation
COORDINATION	Activities that involve a sequence of actions that must be performed in a given order **Note:** Improvements more likely to occur if activity is performed when the athlete is not tired
BALANCE	Activities where difficult or unusual positions must be assumed and maintained OR Activities where normal movements are performed in unusual positions OR Activities where balance is challenged by external factors or an effort is required to maintain balance
TACTICS	Situations that are relevant to the competitive experience AND Situations that involve decision-making in order to gain an advantage AND Situations that involve some degree of uncertainty OR Situations where the best option must be selected

For more detail about developing specific athletic abilities, see Developing Athletic Abilities in **Appendix C

4.6.9 SEQUENCES ACTIVITIES DURING THE SESSION

Practices often feature several activities aimed at developing a variety of abilities. Paying attention to the order in which activities take place in the main part of the practice may increase the probability of achieving the desired goal. Here are a few general guidelines about the optimal order of activities.

EARLY IN THE MAIN PART OF THE PRACTICE

Athletes are not tired, so try to plan for:

- Activities to acquire new techniques, skills, or motor patterns
- Activities that develop or require coordination or balance
- Activities that develop or require speed

THEN CONSIDER...

- Activities to develop or require speed-endurance
- Activities that develop or require strength
- Activities that develop or require strength-endurance

LATER IN THE MAIN PART OF THE PRACTICE

Athletes may be tired, so try to plan for:

- Activities to consolidate skills already acquired
- Activities that develop or require aerobic endurance
- Activities to develop flexibility

Photo: John Kunicek

4.7 TRAINING PRINCIPLES

Some fundamental training principles can be formulated, given the information provided throughout this document. Principles are general guidelines that apply at all times. You should make sure that they are respected in all the activities you plan. The table below outlines key training principles and presents a brief definition of each.

PRINCIPLE	DEFINITION AND IMPLICATION
ADAPTION	Over time, athletes learn and become accustomed to the tasks and activities that they must perform in training, as well as to the conditions in which these tasks and activities are executed.
SPECIFICITY	Particular tasks or activities, performed in particular conditions, lead to particular adaptations that are not necessarily transferable to other tasks or conditions.
OVERLOAD	The nature, intensity, duration, and frequency of the training tasks or activities must represent an adequate challenge for the athlete and force him or her to produce an effort.
INDIVIDUALITY	The demands of a task or activity must be adapted to the capabilities of the athlete to induce the desired training or learning effects.
PROGRESSION	The overload or challenge must be introduced in a progressive and logical fashion over time, from simple to complex, part to whole, and easy to more difficult.
PURPOSE	A training activity's desired effect on training or learning must be clear. The purpose determines the best activities, methods, and conditions to use in the practice. Athletes must also have a clear purpose in mind when they perform a task.
RECOVERY	The body must recover from the fatigue that results from the training activities; otherwise. progression may not occur.

"Purposeful and adapted practice makes perfect"

4.8 DECISION TRAINING: *A NEW APPROACH TO COACHING*

The following is an excerpt taken from the coaching resource Decision Training: A New Approach To Coaching written by Dr. J. N. Vickers and commissioned by the Coaches Association of BC (CABC). For more information about the book or to place an order please go to the Resources section of the CABC website at **www.coaches.bc.ca.**

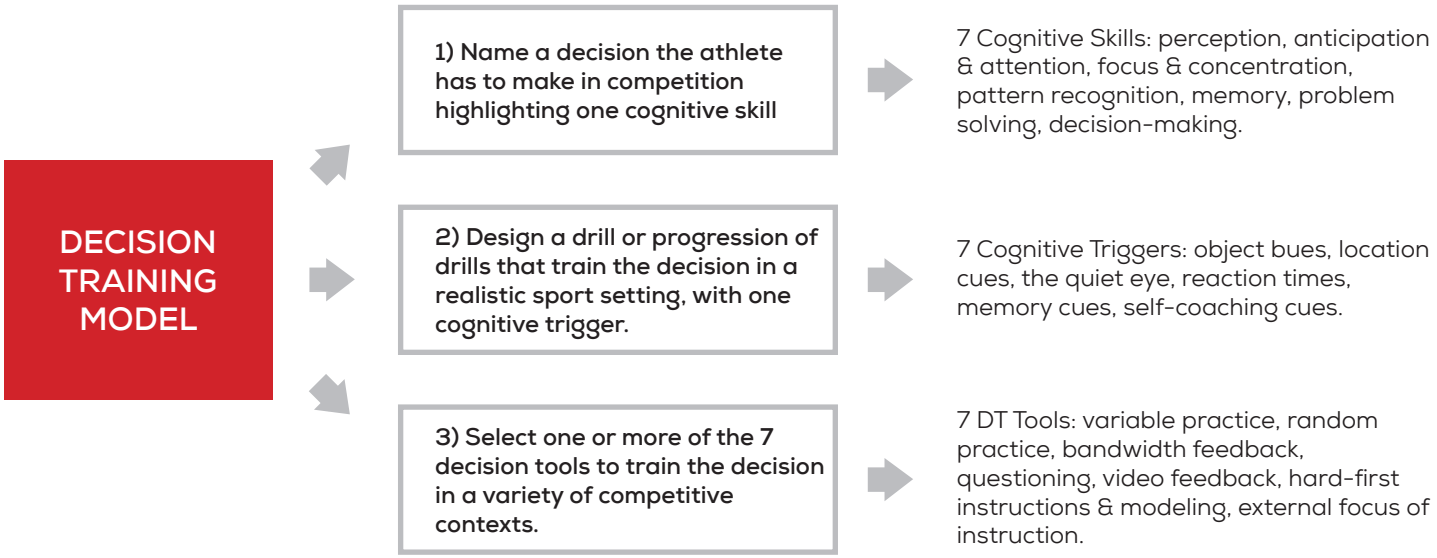
Decision training is the psychological training led by the coach within each and every practice and is composed of a three-step decision training planning process and seven decision training tools. Decision training joins psychological training, biomechanical training and psychological training (see figure1) Decision Training

THE 3 DECISION TRAINING STEPS

Step 1: Define the decisions your athletes have to make when competing/performing. These decisions should be sport and situation specific and define the cognitive skills needed to perform at the highest level. For example, to attend to specific cue(s), to retrieve from memory the correct solution(s), to retrieve from a number of alternatives, to recognize a specific strategic pattern, to concentrate on a specific strategic pattern, to concentrate on a specific location, to solve a problem, to be creative in adapting and exploiting all conditions encountered.

Step 2: Describe the drill or activity where the decision is best trained. These drills should simulate competitive performance situations. Each drill should be safe, developmentally appropriate and simulate conditions found in competition.

Step 3: Select one or more of the TD Too(s) that best trains the decision within the drill or activity.



4.8.1 THE 7 DECISION TRAINING TOOLS

01

VARIABLE PRACTICE
Requires the athlete learn a number of variations of a skill in a competitive setting.

02

RANDOM PRACTICE
Combines different skills of the sport within game-like drills that simulate competition.

03

BANDWIDTH FEEDBACK
Feedback is gradually reduced or faded requiring the athlete to function more independent of external guidance

04

QUESTIONING
Requires asking questions that probe what the athlete understands about the drill, tactic, or skill being trained

05

VIDEO FEEDBACK
The athlete views his or her own performance on video in order to detect what is done well and what needs to be improved

06

HARD/FIRST INSTRUCTION
Complex technical and tactical information is presented early in the season rather than later

07

MODELING
The athlete views and expert or other athletes in order to learn what is required to perform. This allows the athlete to learn how to analyze skills and strategies relevant to their sport.

4.9 PRACTICE PLANNING TIPS

- Always include a warm-up in your practice plan. Never skip or rush the warm-up, as this may lead to injury. If you are short on time, consider having athletes warm up before the practice; for instance, if facilities are available for only a limited period of time.
- Get help from anyone who is available. For example, parents can help by arranging stations so that you can maximize the time your athletes are active. In this case, make sure your assistants are familiar with your practice plan, and give them simple and clear tasks.
- Avoid activities and games that eliminate people – the athletes who need the most practice will probably get bumped first.
- When you plan an activity that involves opposition, pair up athletes with similar ability levels so that they can challenge each other and each has a fair chance of success. This may also reduce the risk of injuries.
- Think of all the skills required to perform the drill! A drill or an activity might be relevant to your sport or to the long-term goal you have in mind, but the skill or fitness level of your athletes AT THIS TIME may be such that they cannot really benefit from it.
- Be realistic about the actual number of skills your athletes can learn in a season. For some skills, it may take a lot of time and practice for athletes to go beyond the Acquisition stage.
- Always make sure that athletes have mastered the fundamentals of their sport before you plan for more advanced techniques. However, it is a good idea to start developing tactical and decision-making skills early on. To do this, put your athletes in quite complex sport-specific situations that require them to use their observation skills, analyze the situation, and come up with possible solutions.
- Plan for fun – can you find a way to develop a skill or ability through a game or activity the athletes enjoy doing? Ask athletes which activities they like the most: use those ones often, or try variations of them to achieve specific goals.
- Be creative when athletes have to do a lot of repetitions, as is the case in the Acquisition and Consolidation stages of skill development. Although your athletes may have to work on the same fundamental movements in many practices to acquire the correct motor patterns, you can avoid monotony by using different activities or games that require the movements and looking for new and fun ways of doing them.
- Take time to get athletes to talk about their own performances and discuss what they think is important to work on improving individually, and if appropriate, as a team. Try to build this into your next practice plan.
- Use random practice whenever possible, as it promotes better long-term performance improvements.
- Better long-term improvement in performance can be achieved by not making practices too predictable.
- Motor tasks that do not produce extreme fatigue or muscle soreness can be practiced every day.
- Tasks that do produce marked fatigue or muscle soreness should not be practiced every day, and recovery between practices must be longer. Alternate the days where these skills or tasks are performed with recovery days, or with days where other, less tiring skills are practiced. For skills that involve some impact or where exhaustion can occur, it may be necessary to practice them only every third day.

- Be aware of athletes' physical capabilities before you ask them to do physical activity (growth and development). Keep in mind that there could be some significant physical differences between your athletes, especially in teenagers.
- Simulate competitive situations in practice. Include all elements of the game or competition in your practices, e.g. rules, competition protocols, interaction with officials, respect for opponents and teammates, etc.
- Make a list of all the skills that athletes should be coached in, given their age and experience – this becomes a key element of your development plan.
- The first time you play a game or conduct a drill, it may not be as successful as you might like – athletes may need more time to learn it. Give the activity a name, so that they will recognize it immediately in the future.
- Find out what your athletes like and dislike about practice. Keep a file or a list of favourite drills, activities, and games. Don't be afraid to repeat a game or drill – we enjoy doing the things we like to do.
- Practice does not make perfect, it only makes permanent. Perfect practice makes perfect, permanently.
- Keep a binder that has EVERYTHING in it: medical information, player information, rosters, directions, systems of play, team rules, etc. Keep a written or electronic record of what you do in practice.
- Make a list of EVERYTHING: have a TO DO LIST (generic sheet for every day/practice).
- Make a list of all your systems of play, break them all down into parts, and organize drills for each individual concept. Break down all concepts into different options. Develop a drill for every option.
- Try to keep things as simple as possible.

4.10 THE ROLE OF THE COACH IN MENTAL PREPARATION

Integrating mental preparation strategies into your training sessions will help your athletes stay focused on achieving the training objectives you set. Involve your athletes in the process and demonstrate the benefits of being mentally prepared for a training session. Your responsibilities in the area of mental preparation include:

- Building positive and supportive group dynamics with athletes.
- Making basic mental skills part of regular training or finding someone who can assist in this area.
- Helping athletes integrate mental-skills training into their performance preparation.
- Helping athletes prepare for all possible events and situations.
- With athletes, using goal setting to map out a journey to success.

Although you can set up the framework, conditions, and process by which the athletes you coach can develop their mental abilities, athletes will be successful in the long term only if you help them develop independence and self-direction in all areas of mental preparation.

For more information on mental preparation for athletes, refer to the NCCP Multisport Reference Material for Basic Mental Skills.

Photo: Ron Hill

4.11 PLANNING A SESSION: SELF-EVALUATION CHECKLIST

Self-reflection is essential to improving as a coach and the Self-Evaluation Checklist is a tool that the coach can use to identify more specific strengths or opportunities for growth. Evaluate your own sessions, or have an assistant coach, athlete or peer observe your sessions. To reach the "certified status" of the Comp Intro Advanced coach, a CSCP Evaluator will review your session in a similar manner during the on snow. See the CIA Portfolio document for additional information.

STRUCTURE AND ORGANIZATION

- The practice is organized and well structured (introduction, warm-up, main part, cool-down, conclusion)
- The length of the practice is appropriate for athletes' age and ability level
- The practice makes full use of available facilities and equipment to achieve the practice goals
- In the main part of the practice, activities take place in optimal order

NATURE OF THE ACTIVITIES

- The practice includes a variety of activities
- Athletes have sufficient practice time during each activity
- The activities have well-defined goals, and the purpose of the tasks involved is clear
- The activities are adapted to athletes' skill and fitness level
- The activities are appropriate to athletes' growth and development stage
- Practice conditions are adapted to athletes' skill level
- The activities present exciting and reasonable challenges to the athletes

SAFETY

- Potential environmental, mechanical, and human risk factors have been considered, and the activities are designed accordingly

5. ANALYZING PERFORMANCE

5.1 CSCP BIOMECHANICS

5.1.1 TECHNIQUES, BIOMECHANICS AND TACTICS

The CSCP Referent Models are coaching tools used to define an athlete's ideal technical and tactical performance (KPI's) at any given stage in the Long Term Athlete Development Model (LTAD).

The current referent models are based on the dynamic relationship between equipment, physics, individual biomechanics and event demands, which may all change over time and from rider to rider.

Effective coaches will have a good understanding of the ideal (desired) performance and the eye to compare with the observed (actual) performance. The discrepancies between the desired and actual performance of Technical and Tactical KPI's will define the training priorities for the day, week, month and season.

When the CSCP referent models are used in conjunction with the LTAD's recommendations for other KPI's (physical, psychological, equipment, environment), a snapshot of the athlete's position in the Athlete Development Matrix (ADM) can be determined and even quantified. Refer to the LTAD for additional guidelines and recommendations. It is available for download from www.canadasnowboard.ca.

The CSCP approach to snowboarding offers tools and activities that the coach can use to help athletes:

- Understand basic physical principles as a foundation for snowboard technique (Biomechanics of Snowboarding)
- Develop a solid base of technical abilities (Technical Tools)
- Develop a good perception of methods that can be used to deal with riding variables and competition situations (Tactical Approach)

5.1.2 THE BIOMECHANICS OF SNOWBOARDING

Biomechanics is the study of human movement that includes mechanical, physiological, and psychological mechanisms. The average snowboard coach should have some basic understanding in each of these areas to increase their coaching effectiveness. It should be noted that this section is intended to be just an overview of the concepts and by no means an exhaustive review of the subject.

5.1.3 THE PHYSICS OF SNOWBOARDING

Coaches that understand basic physics, as they relate to snowboarding, will gain significant insight as to why our technique looks the way it does. In conjunction with understanding how an athlete can move (physiology), coaches can really begin to improve an athlete's technique, help reduce injuries and achieve greater performance. It can be argued that the best riders are those that can manage the physics of snowboarding, or at least their respective discipline, the best.

NEWTON'S LAWS:
Sir Isaac Newton described force as the ability to cause a mass to accelerate. Snowboarders must create, control and release forces to accelerate themselves and their boards as required by their discipline and the specific maneuvers they attempt to perform. Newton's three laws can be summarized as follows:

First Law: When viewed in an inertial reference frame, an object either remains at rest or continues to move at a constant velocity, unless acted upon by an external force.

Second Law: The vector sum of the external forces F on an object is equal to the mass m of that object multiplied by the acceleration vector a of the object: F = ma.

Third Law: When one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction on the first body.

- **FORCE:** Something that causes motion or change of an object.
  - Impulse is the measurement of a force over time.
  - Ground Reaction Force (GRF) – the force the snowboarder applies to the ground.

  How can you measure the force your athlete can exert? How much can they handle?
  - Plyometrics/drop-jump tests.
    - Standing still, body weight = Normal GRF.
    - Landing jumps etc., increases GRF.

- **MASS:** The amount of property (matter) an object has. It is measured in kilograms (KG) and is often confused with weight. In space, you are weightless but you still have a mass.

- **GRAVITY:** The relationship where two bodies of mass are attracted and pulled to each other. When a snowboarder travels over a jump, it is gravity that pulls that riders mass back to the ground.

- **MOTION:** The change in location of an object over time (Wikipedia)
  - **Velocity** is the measurement of how fast and the direction of a moving object.
    - **Acceleration (Vector)** is the change in an objects velocity over time.
  - Motion in a straight line is **Linear Motion**
  - Motion of an object travel around the circumference of a circle is **Angular Motion.**
  - Momentum (Linear) is a measurement of an objects mass and velocity while traveling in a straight direction (p = vm)
  - **Angular Momentum** is rotational velocity started by an action (angular motion).
    - A rider can control angular velocity by;
      - Using muscular effort in the core of the upper body and moving the center of mass back over the snowboard.
      - Maintaining board contact with the snow.
      - Completing turns before rolls or jumps
      - Widening arm position to stabilize rotary movements
    - A rider can increase angular velocity by:
      - Encouraging rotational speed with muscular effort (throwing arms/head/shoulders into a spin)
      - Allowing the board to leave the snow
      - Using rolls and jumps to enhance time in the air and reduce board friction on the snow
      - Keeping arms tighter to the core to enhance rotary movements
  - **Torque** is the tendency of an object to rotate around a focal point when a force is applied to it.

5.1.4 APPLIED BIOMECHANICS IN SNOWBOARDING

How newton's law relates to snowboarding

How can we test and alter the following in snowboarding?

- Balance?
  - A. Clinically using a Romberg balance test (or similar) or on the hill watching your athlete stand on one foot (eyes open then closed).
  - Alterations; balance improves with daily practice. A wider base of support and lower center of mass also improves balance.

- Stability (factors that influence stability)?
  - A. Similar to testing for balance but try with a force applied. Athletes can partner up and apply gentle forces on each other's shoulders to see how stable they are. Many factors such as the snow conditions, board size, etc. can affect stability. What else can effect it (discussion)?

- Centre of Mass?
  - Consider; can you change the center of mass of your athletes? How?

- Base of Support?
  - Consider and discuss with your course peers; when is a wide base of support beneficial in snowboarding? When is a narrower stance preferred?

Snowboarding requires riders to manage heavy loads on the muscles and the skeletal system. A rider must be able to:

- Maintain alignment to manage external forces
- Manage forces that act to pull a rider outwardly when rotating (centrifugal force)
- Work with gravity
- Manage loading created by the riders interaction with equipment and the terrain

Coaches must understand basic biomechanical principles to understand:

- Why Train to Train athletes snowboard in a particular way
- What factors influence Train to Train athletes the most

The important biomechanical principles in riding are:

- Stability with Mobility
- Force
- Velocity
- Impulse
- Direction
- Angular motion
- Angular momentum

5.1.5 STABILITY WITH MOBILITY

The ability to maintain/manage instability while moving.

Encourage riders to test their stability by riding a variety of:

- Speeds
- Turn shapes
- Direction (switch)
- Terrain
- Events and skills contests (ollie comps, obstacle courses, banked SL, etc...)
- Snow conditions

5.1.6 FORCE (MASS X ACCELERATION)

In snowboarding, the force that normally has the biggest impact is friction. A rider can apply a force using their body and mass to change the direction of their snowboard.

Factors that can affect a rider's ability to product and absorb force are;

- joint alignment, equipment
- snow conditions/terrain/feature
- muscular effort (strength)
- muscle groups and the order they are recruited

5.1.7 VELOCITY (DISTANCE/TIME)

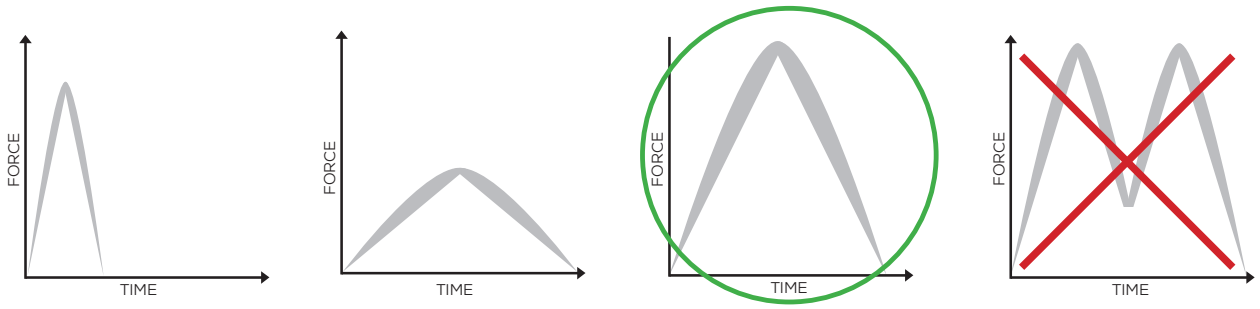
Factors that affect a rider's ability to produce and carry velocity are:

- The rider's mass
- Type of board and tuning
- The amount of force applied
- Length of time the force is applied
- Timing of the application of force (at the right moment)
- Direction of the applied force
- Snow conditions/terrain

5.1.8 IMPULSE (FORCE X TIME)

Impulse is related to the rider's ability to apply a force to cause a change in momentum.

- Applying a small amount of force over a longer period of time will have the same effect as a large amount of force over a short period of time.
  - o For example; it will take more force to stop quickly or to rotate quickly then it will take to come to a slow stop, or make a slow rotation.



5.1.9 DIRECTION

Refers to the path that the board and the rider travel when the board and centre of mass are released from loading. Factors that affect a rider's direction are:

- Phase of the turn/maneuver (timing)
- Line
- Speed
- Where on the board the force is applied

5.1.10 ANGULAR MOTION (TORQUE)

The board acts a lever to which a rider applies force by edging and steering, creating torque or a rotation. Applying force with proper timing (phase of turn/maneuver) will assist in creating a more effective movement or torque.

The amount of torque depends on:

- The amount of applied force
- The duration of applied force
- The location of the force along the board (nose/centre/tail)

To resist or manage torque that is built up in the board, a rider must:

- Create angles in the body (angulation)
- Controlling rotary movements of the large body parts (rotational balance)
- Maintain alignment to counter the effects of external force (planes of balance)

PLANES OF BALANCE

Coaches with an understanding of the planes of balance will be able to determine:

- How entry level athletes maintain stability
- Why some athletes have better stability skills than others
- How growth and development factors can affect a young athlete's progress
- The relationship between skill development in riding and involvement in other sports
- How athletes with disabilities adjust technique to maintain stability

FORE/AFT BALANCE (FRONTAL PLANE):
Movement between the front and back foot or nose to tail.

Factors that affect an athlete's fore/aft balance include:
- Equipment – boot stiffness, canting, forward lean, stance width, stance angles
- Core strength and physical abilities
- Conditions/terrain

Centering:
The middle point in between the bindings the center of the board or closer to the tail. The nose of the board should always be equal or longer to the tail.
When a rider is centered on his board, spinning is smoother and switch riding easier. Shifting the stance back (towards the tail) adds stability at speed, floatation in powder and more control of the tail.

Width:
The distance between the two bindings, measured from the middle of the center disks
Usually in inches.
Width may need to be adjusted due to adolescent growth spurts.

LATERAL BALANCE (SAGITTAL PLANE):
Movement forward (toes) and backward (heels) over the platform.

Factors that affect an athlete's lateral balance include:
- Inclination and angulation skills (separation)
- Edging skills
- Core/back strength
- Equipment – Plate system, forward lean, boot/binding stiffness

Inclination: Varies the edge angle by leaning over the toe edge, or heel edge with large muscle groups (hips and core).
This will help maintain balance by keeping the center of mass on top of the base of support.
Moving the entire body (leaning) to the inside of a turn (or feature) will help to increase the edge angle: this is called inclination.
Inclination will initiate a movement toward the desired direction of travel by shifting your weight in that direction.
A turn is initiated by bringing the Center of Mass towards the inside of the turning arc
Angulation: Varies the edge angle by moving and creating angles in the hips, knees and ankles joints.
This will help maintain balance by keeping the center of mass on top of the base of support.

VERTICAL BALANCE (FRONTAL &/OR SAGITTAL PLANE):
Up and down movements along the Sagittal Plane
Factors that affect an athlete's vertical balance include:
- Range of movement (flexibility) through body joints
- Equipment – boot/binding stiffness, forward lean, stance width
- Ability to maintain alignment

ROTATIONAL BALANCE (TRANSVERSE PLANE):
Movement (or resistance to movement) that twists the upper body and lower body in opposite directions on the vertical axis (separation)
Factors that affect an athlete's rotational balance;

- Physical conditioning (Core strength)
- Separation skills - ability to come in and out of alignment as required
- Ability to use arms (and core) to control rotary movements
- Steering skills - ability to steer feet and legs
- Edging skills - ability to increase and decrease edge angle to create platform to brace against.

PLANES AND AXES OF MOTION
There are 3 primary planes and three primary axes. This allows for **six degrees of freedom**. Understanding the primary planes and axes helps with assessing skills.

TOE-HEEL PLANE
Sagittal Plane

NOSE-TAIL PLANE
Frontal Plane

TWISTING PLANE
Transverse Plane

LATERAL AXIS
Medio-Lateral Axis

FORE-AFT AXIS
Anterior-Posterior Axis

ROTATIONAL AXIS
Vertical Axis

Photo: Natasja Vos

5.1.11 BIOMECHANICAL ADAPTATIONS FOR PARA SNOWBOARD

Coaches can use a biomechanical analysis of snowboard performance as an objective method of determining the effectiveness of a particular training technique, further aiding in the coaches understanding of the mechanisms influencing their riders performance.

When working with athletes with a disability there is a greater need for an individualized assessment when it comes to the functional outcome of a particular skill or task. For example, the CoM of a para athlete may only shift slightly based on their impairment(s) or mobility limitations but the external forces acting upon them remain the same. It is common for a para athlete to experience a limited range of motion that will directly impact their mobility while riding and ability to manage factors that affect their ability to produce and absorb forces.

How do we as coaches navigate this? It is important to remember that while the fundamental principles remain the same between Para and able-bodied athletes, there is often more room for exploring variations of techniques with para-snowboard athletes. It's all about understanding the underlying principles and adapting them to suit the individual riders needs and understanding the impact the variation will have on the desired outcome.

Curran, Sarah A., and Laurent Frossard. "Biomechanical Analyses of the Performance of Paralympians: From Foundation to Elite Level." (2012): 380-95. Web. 15 July 2016.

CANADA PARA SNOWBOARD

5.2 THE CSCP TECHNICAL MODEL

Stage 3: Learn to Train & Stage 4: Train to Train athletes learn fundamental riding skills through active engagement in activities in both supervised and unsupervised environments. Since children learn from what they "see" and "do" rather from what is "said", the challenge for a coach in the Competition Introduction context is to:

- Provide good demonstrations of riding skills for visual impact (at the **initiation** stage).
- Promote volume riding to allow the athletes time to model form and movement (at the **acquisition** stage).

Therefore, the CSCP coach must:

- Demonstrate good riding skills in the athlete's discipline
  - **Show** what to do and **how** to do it
- Allow time for the riders to perform the tasks
  - Mileage!

The **Competition Introduction Coach** will be able to:

- Introduce Stage 3: Learn to Train athletes to fundamental riding skills
  - **Initiation** to basic form and movement.
- Help Stage 3: Learn to Train athletes learn to model general form and movement
  - **Acquisition** gross motor movement patterning

The **Competition Introduction Advanced Coach** will be able to:

- Help Stage 4: Train to Train athletes learn to adapt and modify gross motor movements
  - **Consolidation** of form and movement patterning
- Introduce and integrate fine motor patterns
  - **Initiation** to advanced form and movements

To help athletes develop strong riding skills, CSCP coaches should refer to the Fundamental Snowboard Skills and utilize the Competency Based Approach.
Refined Motor Skills (The Small Joints)

Photo: Jim Hall

5.2.1 CSCP TECHNICAL SKILLS CONCEPT

As coaches, it is useful to have a common language to describe what movements are necessary to contribute to different outcomes. The CSCP recognizes five fundamental snowboard skills that can broadly describe these movements:

1. Position & Balance
2. Pivoting (Rotation)
3. Edging
4. Pressuring
5. Timing & Coordination

The hierarchy of these skills can be adjusted to reflect the specific outcomes being sought and can also be identified into two separate motor categories.

Gross Motor Skills (The Big Joints)

- Position
- Balance
- Timing
- Coordination

Refined Motor Skills (The Small Joints)

- Rotation
- Edging
- Pressuring

POSITION:

An athletic stance that promotes stability, yet allows for mobility and/or agility.
Athletes should adapt and modify their stance to suit:

- Individual physical make-up (riders with disabilities or limitations)
- Biomechanics and growth factors
- Discipline/Environmental performance outcomes (Style, Cross, Alpine)
- Equipment

BALANCE:

Attempt to maintain equilibrium in all planes of balance.

Athletes should develop balance by exploring and testing:

- Agility
- Recovery skills

  Balance = Controlling the body's equilibrium
  Stability = Resistance to losing balance. Influenced by Line of Gravity and Height of Centre of Gravity.

The main goal of the "learn to ride" rider is finding balance. The good rider can find balance again quickly, smoothly, and under all-conditions using the three planes of movement.

THE 4 FACTORS THAT INFLUENCE BALANCE AND STABILITY

1. Center of Gravity
AKA Center of Mass Gravity is the force that attracts bodies and objects downwards to the centre of the Earth. The centre of gravity is the balance point -The total effect of gravity on the body as if it were all concentrated at a single point. The location of the centre of gravity is dependent on the shape of the body, the movement of the limbs, and the distribution of the mass. It is the total effect of gravity on the body as if it were all concentrated at as single point. The centre of gravity does not have to lie on the base of support.

2. Height of Gravity AKA Vertical Balance
The lower the center of gravity, the more stable the athlete will be, but the lower you are, the more constricted your range of movement is.
Vertical axis relates to movement along the head-foot plane.
Good balance will allow the athletes to move their center of mass along this axis in a turn (to create or control pressure) or while riding over changing features to maintain balance. Good posture will improve an athlete's vertical balance. Good posture will also improve an athlete's vertical balance.

3. Line of Gravity
The position of the Center of Gravity in relation to the base of support defines the line of gravity. The farther the center of gravity is from the base of support, the least stable a rider will be while the opposite also applies.

4. The Amount of Mass
The amount of mass is constant in snowboarding therefore does not come into effect.

TIMING:
Selecting the right moment to begin and/or complete an action.

Athletes should focus on:
- Turn symmetry (heel side and toe side performance is equal)
- Releasing feet and center of mass at the same time to unload the board
- Stabilizing the centre of mass to control angular momentum of upper body
- Moving the center of mass forward and inside the arc to begin loading the board (inclination)
- Apply force at the right time and place in turns and airs

COORDINATION:
Combining the movement of different body parts into a common action.

Athletes should coordinate different body segments to help:
- Direct the board with the feet and legs
- Discipline arms (and upper body) to move with the turn/maneuver

ROTATION:

To guide the board in a desired direction by turning the body and/or a part of the body.
Athletes require the ability to:

- Direct and re-direct the feet and legs, simultaneously or independently by:
  - Pivoting - Rotation around a point on the board
  - Steering:
- Sequence moving joints (arms and/or center of mass) to control the rotation of the board (and body).

EDGING:

Using the edge as a slicing tool.

Athletes should focus on being able to:

- Roll or bank the board onto the sidewall by moving the center of mass into and slightly ahead of the direction of movement (inclination).
- Flex joints in the lower body to maintain balance over the edge during a turn (angulation)
- Increase or decrease the edge angle as speed, conditions, turn type or maneuver dictate

PRESSURING:

The result of loading or unloading the board.

Athletes require the ability to create (load), control and release (unload) pressure with:

- Steering skills – increase or decrease the steering angle of the board
- Edging skills – increase or decrease the edge angle of the board
- Inclination and angulation skills
- An ability to direct and redirect the feet, legs and other body parts according to terrain/ conditions
- The management of external forces acting on the board and rider
- Physical conditioning capacity (strength)

5.2.2 COMPETENCY BASED APPROACH

Through the blending of the five skills we can describe snowboarding, although the importance and usage of particular skill will vary based on the desired outcome. Once coaches have a clear performance outcome in mind, a competency, they can begin to identify what skills will be of most importance.

The following basic competencies must be consolidated by athletes in Stage 3: Learn to Train while freeriding;

- Centered, mobile position:
  - Relaxed, adaptable position with weight generally centered over both feet.

- Turning with the lower body:
  - When we turn the snowboard, efficiency requires that we use the hips, knees and feet (or a combination of).

- Balanced over the working edge:
  - Ability to move inside a turn to have the body in the correct position
  - Ability to let the board be flat when necessary (no edge)

- Strength & Flow
  - Anticipation
  - Ability to link skills together smoothly (flow)

- Arc to Arc (Linking)
  - Efficiently moving from one turn to the next
  - Efficiently moves from feature to feature
  - Linking manoeuvers

- Loading & Deflection
  - Can the rider bend their board AND control the direction of the resultant pressure for a particular outcome?

- Rotational versatility
  - Are there a variety of turn shapes?
  - Can they adjust between sliding and carving depending on the desired outcome?
  - Can they adjust the speed of rotation to the size of the feature?
  - Can the rider control (increase, decrease or maintain) speed through turn shape?

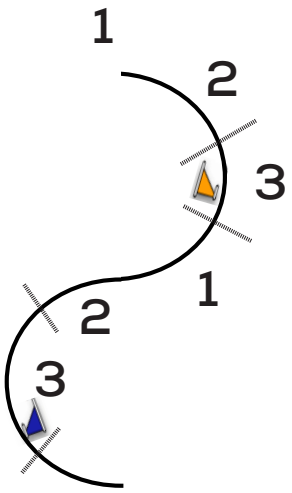
5.2.3 PHASES OF A TURN

The three phases of a turn will help the rider understand:

When and where to start the turn (timing)
What to do in the middle of the turn
When and where to finish the turn (timing)
How to link turn (coordination)

The Three Phases of a turn are:
Phase 1: Preparation (unload or release)
Phase 2: Initiation (edging)
Phase 3: Execution (loading)

Phase 1: Preparation (Release)
Encourage riders in this phase to:
Release the edge or unload the board from the previous turn (un-weighting, propulsion, gliding)
Move the upper body (centre of mass) over and ahead of the feet (alignment)
Set the edge for the new turn (gliding on edge, inclination)
Create a solid platform (base of support)

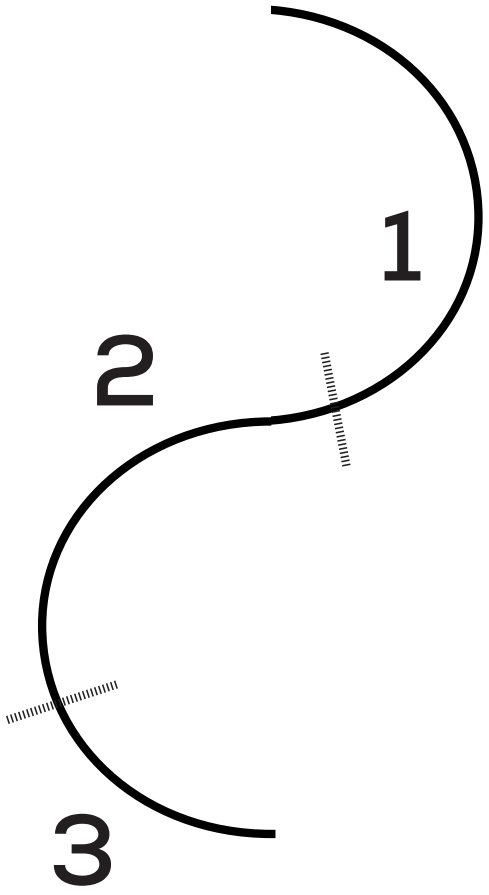


Phase 2: Initiation (Edging)
Encourage riders in this phase to:
- Maintain skeletal alignment and muscular effort in the legs
- Continue moving centre of mass forward and inside the arc (inclination)
- Increase lateral movement of lower joints (edging) with both feet and legs (steering)
- Prepare for pressure build-up (manage loading)

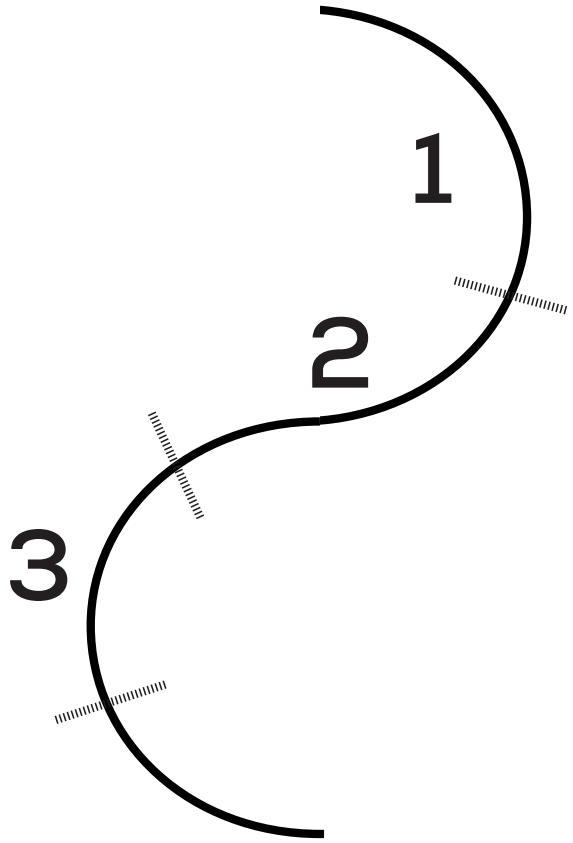
Phase 3: Execution (Loading)
Encourage riders in this phase to:
- Maintain alignment in all planes
- Continue inclination
- Increase edging to full flex (angulation)
- Try to use separation and angulation skills to manage loading
- Optimize board speed in the desired direction (steering)

Some Definitions
- Line (on snow) – where the board is in relation to the fall-line or features
- Line (off snow) – the path of flight in relation to terrain/feature
- Turn Shape – Whether the board is carving or sliding in the turn, fall line to full turn shape (across fall line)
- Size of turn (type) – How to manage speed on different terrain/features
- Speed management – Controlling, maintaining or generating board speed
- Linking of maneuvers/turns/features

STAGE 4
TRAIN TO TRAIN



STAGE 5
TRAIN TO COMPETE



STAGE 6
TRAIN TO WIN

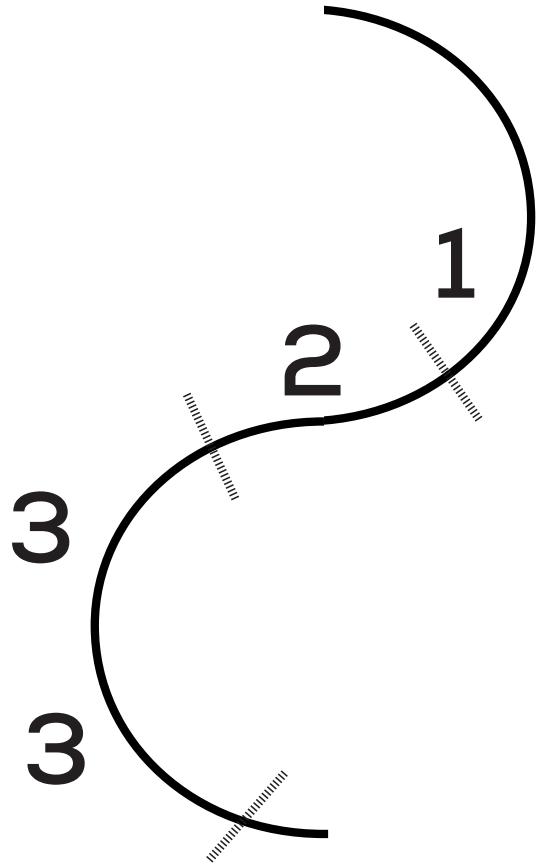


Photo: Eric Escaravage

5.2.4 SPEED

The speed portion for the Comp Introduction course is focused on building the basic skills that are critical in the layering of skills necessary for future success. Even at national team level, these skills are missing in many riders. If we can develop basic skills such as turn shape, good sequence of movements, position and gross motor skill movements. Then we will build a nation of better riders top to bottom.

GROSS MOTOR SKILLS
Hips, Core, Thighs

Get your mass inside the turn, at the top of the turn. Develop the riders to move their mass first and get their feet to follow. It is key to ensure that the big muscles move at the right time (timing) and in the correct sequence (coordination).

REFINED MOTOR SKILLS
Ankles, Knees, Arms, Hands

A young rider may not have refined motor skills, including ankle or knee flexion to create the turn shape desired. The goal for this level of rider is to move from a 'J shaped' turn to a 'C shape turn' through working to get their mass inside the turn early using inclination.

MOVEMENT
The amount of movement inside a turn is relative to the direction of travel, size of turn and fluidity from one turn to the next.

INCLINATION (INITIATION)
Tilting the vertical axis, without breaking at the waist.

DE-INCLINATION (RELEASE)

If a rider doesn't move over his mass back over the board before the switch, than all other skills will not sequentially happen to glide from one turn to the next.

ASSESSMENT OF SKILL

A simple 5 step sequence to determine what type of correction is needed.

1. Can the rider link turns?
Always relative to the skill level of the rider. If they cant link turns, determine if the surface is appropriate for the skill of the riders.

2. What kind of turn shape?
- Is the rider performing the turn shape requested?
- Does the rider understand what is being asked of them?
- Is the turn shape appropriate for the surface?
- Snow condition, steepness, traffic?

3. How is the the board moving?
- How much edge angle?
- Slight angle at the top of the turn?
- Max in the power phase?
- Does it reduce once the riders begins exiting the fall line?

4. How are the big joints moving?
- Is the mass moving over the board and then down into the new turn with good timing?
- Is there a good sequence of movements?
- Does the rider get their mass back over their board then down into the new turn?
- Do they incline before angulating?
- Is the rider staying over there board in the neutral position?
- Is the rider twisting his upper body? Twisting is a result of poor sequence of movements Mainly not moving over the board and then diving down into turn.

5. How are the small joints moving?
- Are the ankles moving inside the turn with the mass?
- Are the arms supporting the movements, or throwing it off?
- Assess skills over time, don't micro- manage riding skill.

TROUBLE SHOOTING COMMON MISTAKES

Tipping in, Banking, Dropping the shoulder or Patting the dog

Tipping in is usually the result of cut off turn shape. By moving shoulders, instead of the core & mid section the rider banks into his turn. This is usually due to the wrong sequence of movements. Look for the entire body moving inside the turn to better to remedy banking issues.

Cause: Rotation at the start of a turn, impatience, starting the turn pivoting and adding pressure after the fall line.
Effect: Jamming/Breaking/Loosing Speed.
Correction: Work on inclination at the top of the turn (downhill edge).
Cause: Poor turn shape and/or bad timing.
Effect: Skidding/Sliding
Correction: Work on steering or try the exercise on easier terrain.

Photo: Adam Higgins

5.2.5 AIR

To help get athletes into the air, coaches must understand the effects of terrain selection in order to teach jumping safely.

Begin with small hits then progress to shallow bumps, rollers and side hits before beginning to jump in the park. Your athlete's success depends greatly on using unintimidating terrain so riders can get into the air all over the mountain and not just in the park.

PHASES OF THE MANEUVER

Each maneuver can be broken down into four phases to simplify the breakdown of where correction can be made. For each phase consider biomechanics, fundamentals, and competencies to determine the best course of action. As a general rule, correcting the phases in order will result in faster progression (example, make corrections in preparation before execution, if there are any to be made).

THE FOUR PHASES OF THE MANEUVER

Phase 1: Preparation (line)
Phase 2: Initiation (set)
Phase 3: Execution (release and follow-through)
Phase 4: Completion (landing)

Coaches should not become too rigid with their interpretation of the phases of the maneuver as a wide variation of corrections may be necessary, growth and development factors will cause limitations to most young rider's progress, and all movements in the phases of the maneuver are blended to promote fluidity in riding.

Phase 1: Preparation (Line)
Encourage riders in this phase to:
- Determine proper speed into feature (start distance)
- Decide on line and set up turn
- Create a solid platform

Phase 2: Initiation (Set)
Encourage riders in this phase to:
- Set for appropriate rotation (if any)
- Generate appropriate lift (ie. Pop, ollie, nollie)
- Maintain solid platform
- Track desired direction *

Phase 3: Execution (Release)
Encourage riders in this phase to:
- Proper timing of the release
- Manage instability

Phase 4: Completion
Encourage riders in this phase to:
- Finish maneuver before landing
- Land in "low impact" zone (sweet spot)
- note, correction here tends to be in the preparation phase
- Absorb impact with a square body position
- Carry speed out of the feature

The phases of a maneuver work for Jumps, Rails, and Halfpipe.

Important things to consider
- When and where to start the maneuver/feature (timing)
- What to do in the middle of the maneuver/feature
- When and where to finish the maneuver/feature (timing)
- How to do perform maneuver/feature (coordination)

It will help entry level riders to become more familiar with the following terms:
- Line - direction into a feature
- Edging - increasing or reducing edge angle for desired result
- Loading - generating energy through pressuring
- Unloading or release – snap – needs a load or windup…
- Board Speed - speed needed to accomplish maneuvers or clear features
- Speed check
- Gliding - maintaining speed in transition phase
- Linking/transition - what is happening between turns and or features
- Alignment - stacked body position over stance

Photo: KingSnow/Kontakt

I SLOPESTYLE

Four ways of generating lift: Coast, Pop, Ollie or Nollie

COASTING:
Ride up to a feature with enough speed to make the landing, the terrain will provide lift without any movement.
Movement timing for coasting:
Preparation Phase: Approach the feature in the neutral stance
Initiation & Execution: Maintain a balanced position at takeoff (resist against the jump)
Completion: Extend the legs to reach for the landing and absorb the impact force

POPPING:
Ride up to the feature with enough speed to make the landing, adding leg extension at the lip of the jump will increase the height of the lift.

PHASES FOR POPPING:
P: Approach the feature in the freestyle stance
I: Push against the ground equally (extend knees, hips) with both legs to generate the lift from a flat base.
E: Flex the legs up (hips and knees) to stabilize the body in the air
C: Extend the legs to reach for the landing to absorb the impact force

Timing the pop with the lip of a jump increases the height of the lift; popping is NOT ollieing.

OLLIE & NOLLIE:
These basic maneuvers increase lift by harnessing the spring (camber and flex) of the snowboard. The ollie springs off the tail of the board; while the nollie springs off the nose. These movements can generate large amounts of lift with or without a jump. Biomechanically, the Ollie & Nollie movements are symmetrical, however the nollie is slightly more challenging as the rider must remain balanced while in motion and the spring is against the direction of motion.

PHASES OF AN OLLIE:
P: Approach the feature in the neutral athletic stance
I: Shift the center of mass over the back leg, and apply force against the ground with the back leg. The spring of the board will "snap" the rider higher into the air.
E: Return the centre of mass back over the centre of the board to regain a balance position with board parallel to the snow
C: Extend both legs towards the landing and absorb the impact force.

PHASES OF A NOLLIE:
P: Approach the feature in the neutral stance.
I: Shift the centre of mass over the front leg and apply force against the ground with the front leg, the spring of the board will "snap" the rider higher into the air.
E: Return the centre of mass to the centre of the board to regain the balanced position ensuring the shoulders return parallel to the ground (avoiding a nose-dive)
C: Extend both legs towards the landing and absorb the impact force

STRAIGHT AIRS:
Straight Airs are the first maneuver that riders will do off jumps and in the pipe. Initially they will not look like a trick until done with shifties or grabs. As the takeoff is the base of every maneuver we perform they should be coached as full maneuvers. This will increase success and prepare the rider for more difficult tricks.

PHASES OF A STRAIGHT AIR:
P: Ride up towards feature with body in neutral stance.
I: At the lip of the feature, coast, pop, ollie or nollie, keeping body aligned tip and tail.
E: Flex legs up to stabilize the body
C: Extend the legs to absorb the landing force

SHIFTIES AND GRABS :
Maneuvers that can be combined with straight airs include "shifties" and grabs. These maneuvers can be tweaked by bending or straitening one or both legs. Slight changes in body shape and timing are where individual style comes from. When grabbing, pulling the board up with the legs will help the riders balance better than reaching down to grab the board with the upper body.

GRABBING A STRAIGHT AIR:
During the execution phase of a jump/lift - raise board with legs towards the body, reach for the board with the arms/upper body and grab it in the desired area - toe or heel edge between the bindings, or the tail or the nose. At this point the grab can be tweaked by manipulating the position of the lower or upper body. The grab should be held for as long as possible until opening to land.

Basic Grabs: All of these maneuvers can be performed riding forwards or switch.
Indie: The Backhand grabs the toe edge between the bindings.
Mute: The front hand grabs the toe edge between the bindings.
Melon: The front hand grabs the heel edge between the bindings.
Stalefish: The backhand grabs the heel edge between the bindings.
Tail: The backhand grabs the tail end of the board.
Nose: The front hand grabs the nose end of the board.

ADVANCED GRABS:
Method: Like a melon grab, however, the rider pulls his board up as the back leg is boned out.
Roast beef: The backhand reaches through the legs (from the front of the body) to grab the heel edge between the bindings.
Canadian bacon: The front hand reaches through the legs (from behind the body) to grab the toe edge between the bindings.
Seatbelt: The front hand reaches across the front of the body to grab the tail of the board.
Crail: The backhand reaches across the front of the body to grab the toe edge between the front foot and the nose of the board.

Shifties: are generated using counter-rotation of the upper and lower body and can be preformed both frontside and backside.

PHASES OF A SHIFTY:
P: Approach the feature in the neutral stance.
I: generate lift (coast, pop, Ollie, nollie) from an aligned position
E: rotate the upper and lower body in opposite directions and return to an aligned position
C: Extend the legs towards the landing and absorb the impact force

FLAT SPINS Rotations (spinning)
Flat spin rotations occur around the Vertical Axis:

There are 2 directions to rotate around your vertical axis; front-side, and backside. Vertical rotations can be in preformed both directions off either the heel or the toe edge, both regular and switch, creating many different variations.

Frontside: Any rotation where the front of the body faces the direction of travel in the first 90 degrees.
Backside: Any rotation where the back of the body faces the direction of travel in the first 90 degrees.

PHASES OF A ROTATION

Preparation Phase:
- A strong platform needs to be set to allow for the desired amount of rotational momentum to be created.
- Rotational energy needs to be created by rotating the upper body towards the desired direction or in the opposite direction if the rider is using a windup. The lower body must maintain the strong platform causing the board to track straight off the lip.
- Set Up Turns: When rotating off a jump the rider must initiate the rotation off of an edge. During the preparation phase a set up turn can be performed to allow the rider to reach the lip on the desired edge while con-trolling speed.

Initiation Phase:
- The energy needs to be released at the proper time to create the rotation.
- Head and shoulders should lead the rotation while the lower body (hips, core) drives the rotation.

EXECUTION PHASE:

- The rotation can be accelerated in the air by decreasing the surface area of the rider(knees up, arms in) or decelerated in the air by increasing the surface area of the rider
- Head and shoulders should continue to look in the direction of the desired rotation

COMPLETION PHASE:

- The rotation must be finish and rider must extend the legs towards the landing of the jump to absorb the landing force.
- If the rider continues to rotate until the landing, reverting or edge catching will occur
- Increasing the surface area of the body will slow the rotation, releasing the grab, looking for the landing and stopping the spin before landing.

Sluffing, carving, or washing takeoffs may allow for a fast spin and a quick progression, but will not lead to success off bigger features or bigger rotations. The greatest rotational momentum can be generated by using the hips to power the spin. The head and shoulders need to lead the rotation in the desired direction but the larger muscles attached to the hips will generate the greatest rotation.

SHOULDER HIP SEPARATION

Larger rotations require more rotational momentum. If the rider can maintain a solid platform while allowing the upper body to begin to rotate or wind-up, greater rotational momentum will occur.

BASIC SPIN PROGRESSION (PERHAPS PUT THIS IN A BOX OR SOMETHING)

Before your riders start spinning off a jump, work through these basic steps:

1. Board off– on flat ground. Practice jumping up and spinning both FS & BS. Once successful, try again with the board on.
2. Flat Land 360's. Try spinning keeping the board on the snow (done on a gentle slope).
3. Travel across the hill and progress to pop 180's (in the air).
4. 180's in the air continuing to the 360 by sliding the board on the snow.
5. Full 360 in the air.
6. Move it to a small jump.


Photo: KingSnow/Kontakt

II RAIL AND BOX RIDING

Riding on metal, wood or plastic shares similar properties with riding on snow and other freestyle environments. Coaching rail riding involves mostly choosing the right environment (the shape of the rail) so psychological factors (fear) can be minimized. "You just need to ride straight for 10 meters"

There is no exact technique to riding rails or boxes however for riders to glide smoothly they need edge and board control. Practice on snow first for safety and confidence and as your riders progress choose the features that match your rider's skill.

Rail progression begins with flat, short, low and wide. Don't step up all the factors at once. Eventually, rails will get higher, longer and narrower before adding incline, declines, kinks and curves.

OLLIE VS RIDE-ON RAILS OR BOXES:
Ride-on rails have no gap between the snow and the feature, these are the easiest to learn, especially with 50-50's, as the rider just has to ride on and off the feature.

Street Style rails have a small jump that leads about halfway up the feature. This gap forces the rider to ollie, nollie or pop onto to the rail before initiating the trick.

Rail tricks are constantly progressing and there are countless variations. They are all comprised of how a rider gets onto the rail, what they do on the rail and how they get off.

A rider gets onto a rail in one of the following ways:
- Frontside: rail is in front of the rider when jumping on
- Backside: rail is behind the rider when jumping on

Rider will land on a rail in one of the following ways:
- Boardslides: sliding the rail with his board perpendicular to the rail – rider must initiate rotation at take off
- 50:50: sliding the rail with his board parallel to the rail
- Presses: sliding the rail with the nose or the tail of the board parallel to the rail
- Lipslide: when the tail of the board crosses over the rail – occur frontside and backside

ROTATING ON RAILS:

Riders will rotate on to, on and off of rails to increase the difficulty of the trick.
A rotation onto a rail is no different than a rotation of any other feature. The rider must initiate the rotation from a platform, create and release the rotational energy, prepare to land on the rail and absorb landing forces.

Rotating off of rails is slightly different as it is much harder to set a platform on the rail, and you cannot use an edge to initiate the rotation. To rotate off a rail the rotation can to be initiated at the takeoff and part of the rotational energy stored and released as the rider exits the rail. One technique is allowing the upper body to begin the rotation and locking the hips until the end of the rail, then releasing the hips and completing the rotation. Counter-rotation can also be used, rotating the upper body and contracting the core to allow the lower body to catch up.

RAIL PROGRESSION (PERHAPS PUT THIS IN A BOX OR SOMETHING)

It's recommended that with Stage 3 riders a building block approach to rail riding will often be the most successful approach. Riders should be taught basic rail skills, 50-50 and boardslide, before learning more difficult skills on more difficult rails (ie lipslides and spins on/off).

Rails can be very intimidating. Athletes need to feel confident in the situation and that they have the skills to manage the rail/box they are looking to complete.

STEPS FOR SUCCESSFUL RAIL RIDING:

Start with having athletes slide over a piece of bamboo on the ground. Look for basic corrections: where are the eyes looking? Are they centered?

Move to a ride on box with a good width that is close to the ground. Practice 50/50's and move onto boardslides.

As the athletes gain confidence, move to other rails and boxes and try other skills (spinning on/off, frontside, etc).

Photo: Brian Smith

III HALFPIPE RIDING

The biomechanics of halfpipe riding are similar to that of freeriding; the same riding principles and techniques are used. Standing balanced on both feet, perpendicular to the snow (freestyle triangle) is the key.

CONFIDENCE AND CONTROL

As the halfpipe feature itself is a unique part of snowboarding, it will take some gradual increases in height up the wall as riders get used to it. Start small and build muscle memory, balance, and confidence by slowly going further and further up the wall. (see drills)

KEY CONCEPTS TO PIPE RIDING

Take off: At the lip of the pipe, the body should be perpendicular with the vert, with the head towards the virtual center of the transitions.
Down Angle: The angle of the edge of the board to the lip of the pipe when exiting – the amount of the angle will change the curve of the air and the speed of the rider.
Riding the Up-Hill Edge: Always ride the up-hill edge of the board (toe edge on frontside wall and heel edge on backside wall); edge change occurs in between the vert and the apex of the air.
Standing on the board: Maintaining the centre of mass over top of the board will give a stable position and allow the board to accelerate up and down the wall of the pipe.

Pipe maneuvers must be performed above the lip. Amplitude (height) above the lip is one of the defining factors in pipe riding and is as important as technical maneuvers.
Speed is a critical factor in halfpipe riding; riders need to be able to ride confidently at high speeds. In order to do any maneuvers including straight airs, riders must be able to get to the lip of the pipe.

Riders need to know how to **maintain and generate speed** in the halfpipe. **Adjusting the following factors will allow the athlete to gain or maintain their speed in the pipe:**

Drop in speed: The speed the rider drops into the pipe from the top or start gate or how far down they ride before dropping into the side.
Down Angle: The angle of the board when compared to the lip of the pipe. The rider will travel faster when the board is more downhill.
Pumping: Applying pressure to the board against the wall on the down and up transitions to propel rider forward at a faster speed.

With a solid edge, the rider can push (pressure the board) against the bottom of the transition to accelerate down and across the pipe using the entire transition to transfer as much momentum toward the opposite wall.

KEY POINTS TO PUMPING:
Pumping movements are based on feeling and controlling pressure. It takes time and mileage to develop this pressure control skill.

In hard snow conditions, pumping while the board is carving is more effective than pumping from a flat base. The carving edge transfers more force against the solid surface.

In slushy or soft snow conditions, pushing against a carving edge will cause it to sink and momentum will be lost. A flatter base offers a greater surface area to push against. Riders can pump while traveling up or down any transition. Pumping while re-entering the pipe is most effective as gravity is also providing acceleration.

To maintain speed in the pipe riders can apply the follow tactics:

Decreasing Edge Angle: The more edge on the wall, the more friction, the slower a rider goes.
Lip to Lip Airs: Airs preformed that leave from the lip and land at the lip. This will maintain more speed than early takeoffs or pushing off wall and landing lower on wall or in the flat bottom.
Waxed snowboard base: A waxed board will decrease the friction on the base which will help the board run faster.
Halfpipe and quaterpipe riding deserve special attention as all the riders forward momentum gets transferred from the horizontal to vertical. Transitions change an athlete's momentum so quickly that the rider must maintain their center of gravity directly under the snowboard at all times. The center of gravity must move with the board as it moves up the transition all the way till it is vertical.

DROPPING!
A pipe run always begins with the drop in. Riders need to understand how to effectively and efficiently enter the pipe to be able to have solid lines through and airs out of the pipe. A rider should be able to set the desired line at the drop in and maintain the same line through to the takeoff.

PHASES FOR DROPPING-IN:
P: 50/50 the coping: Ride parallel to the coping, just on the edge of the pipe.
I: Can initiate with a small ollie, pop, or up-unweighting while edging or pivoting the nose towards the lip.
E: Roll-in: Using the slight edge angle to enter the pipe. Drop the body over the front of the board while allowing the board and body to roll onto the vertical wall. This movement must be done quickly. In a good roll-in the rider's head should be at the same height on the wall as his feet.
C: Line: Transfer the center of gravity back over the centre of the board and set the desired line/ edge and maintain it through the transition while keeping the center of gravity in the centre of the board.

FACTORS AFFECTING LINE CHOICE:
Wall height, pipe length, pitch pipe built on,width of pipe walls, trick choice, and snow quality.

Example:
Higher pipe wall = longer pipe = open lines = more speed
Small wall height = short pipe length= steeper lines=less speed
Small wall height= longer length= flat pitch= open line to build speed

BASIC PIPE MANEUVERS (PERFORMED FORWARDS OR SWITCH):

Frontside Air: A straight air on the riders FRONTSIDE wall. Up on toe edge, down on heel edge.
Backside Air: A straight air on the riders BACKSIDE wall. Up on heel edge, down ontoe edge.
Frontside Alley-ooP: A straight air on the riders FRONTSIDE wall where the rider turns UP the pipe instead of down. Up on toe edge, down on heel edge.
Backside Alley-ooP: A straight air on the riders BACKSIDE wall where the rider turns UP the pipe instead of down. Up on heel edge, down on toe edge.
Air to Fakies: Rider rides up the wall on edge and into the air and returns without ro-tating, now riding switch on the same edge as the take off. These can be preformed on either wall, frontside or backside.

ROTATIONS IN THE HALFPIPE

Flat spin rotations preformed in the pipe are executed by the same movement and timing as rotations off any other feature. The main differences are that you may be taking off on the opposite edge, and that 180s and 540s land regular while 360s and 720s land switch.

HALFPIPE SIZES

Halfpipes range in size and shape, and the quality always depends on the mountain staff and their pipe cutter. The three most common halfpipes are 12ft, 18ft and 22ft.

22ft Competition Halfpipe:

In the majority of high level competitions, the pipe is 22ft. The larger size and longer transitions allow for larger airs with a safer margin of error. 22ft pipes have to be ridden fast, and with confidence, and must be maintained at a very high level. Poor quality halfpipes can easily result in injuries, pay attention to the shape of the lip and the vertical section of the pipe.
There are currently two machines that cut 22ft pipes, "The Zaugg, Monster" the "Global Cutter" each has a unique shape.

18ft Super Pipe:

The original super pipe cutters were 18ft, the larger transitions made it safer for riders to progress their riding. Again like the 22ft pipe, these need to be maintained effectively.

12ft Mini Pipes

The mini pipe has made resurgence in the snowboard world. Hopefully all resorts will have one in the near future. This pipe is rideable under most circumstances, it has short quick transitions, but is less intimidating than the larger pipes. The mini pipe is a great learning environment for athletes new to the halfpipe. If they can learn the basics in this pipe, they will have an easy time adapting to larger pipes.

5.3 THE CSCP TACTICAL APPROACH

A tactic is a conceptual action aimed at achieving a goal. Tactical performance is determined by its outcome, not what can be observed (ie. A tactic to go faster is increase line. If athlete is not fast, the tactic either did not work or was not executed properly).

TACTICAL can be used in two different contexts in snowboard.

1. **Competition Tactics** refers to how athletes uses the technical skills they have acquired to go faster, jump higher, or do better tricks than other athletes. This is covered more in Support Athletes in Training and Support Athletes in Competition.

2. **The tactical approach** refers to how a technical skill is utilized, changed, or adapted to achieve a change in performance.

Examples of a **tactical approach** are:
Line (on snow) – where the board is in relation to the fall-line or features
Line (off snow) – the path of flight in relation to terrain/feature to achieve a specific landing position
Turn Shape – Whether the board is carving or sliding in the turn, fall line to full turn shape (across fall line) to achieve a different line
Size of turn (type) – How to manage speed on different terrain/features, going slower or faster.

The Competition Introduction Coach will be able to:
Introduce tactics into daily training.
Introduce how to modify and adapt movement patterns to achieve different outcomes.

The Comp Intro Advanced Coach should understand the following tactical applications:

Develop a good perception of methods that can be used to deal with riding variables.

Introduce Stage 4 athletes to a discipline specific tactical approach; (SBX) turning, race line, starts, rollers, jumps, drafting, (SS) trick choice, jump shape/size, approach, different features, (HP) down line – speed control, trick choice.

Ability to adjust the tactical approach in a variety of situations.

5.3.1 SBX SPECIFIC TACTICAL APPROACHES

STARTS-

Coaches should have the ability to understand and introduce:

- Proper sequencing of body movements
- Different start techniques (time trial, press and regular pull)
- Ability to adjust technique towards first feature
- Introduce the athlete to the ability to ride a straight line and glide out of the start gate flat based

ROLLERS-

Coaches should have the ability to understand and introduce:

- Flat base riding
- Proper unweighting on the approach and application of pressure (pump) out of the feature
- Doubling, tripling
- Pressure management and utilization of pumping to gain speed

JUMPS-

Coaches should have the ability to understand and introduce:

- Proper approach to the feature
- Adjusting the movement in the air through pop or absorbing the feature
- Speed control in and out of the feature
- Proper landing and absorption while maintaining or increasing speed

DRAFTING-

Coaches should have the ability to understand and introduce:

- The general concept of drafting and where it can be useful
- The ability to have the athletes be comfortable with close riding
- Ability to react to what is going on around them and adjust as need be

PASSING-

Coaches should have the ability to understand and introduce:

- Strategic approach to passing, where and when
- Understanding of athletes personal strengths and to choose the proper moments to be able to pass
- Ability to read the course to choose effective passing lanes
- Blocking the line to avoid being passed

RACE LINE-

Coaches should have the ability to understand and introduce:

- Different approaches to all time trial race lines based on athletes technical ability
- Ability to understand different lines and adjustments necessary when riding heats
- Individualized race lines based on personal riding abilities
- Dictating the line of the race in heats and managing the other athletes

INSPECTION-

Coaches should have the ability to understand and introduce:

- Ability to build a good plan for athlete and coach track inspection which will allow them to be able to execute the planned line approach
- Ability to break the track down in manageable sections to learn the line
- Come up with a visualization plan with the athletes
- Address key technical challenges in a tactical approach in regards to riding the features.
- The coach should be able to distinguish between time trial heat lines
- Discuss tactical plans for passing and approach for racing particular riders

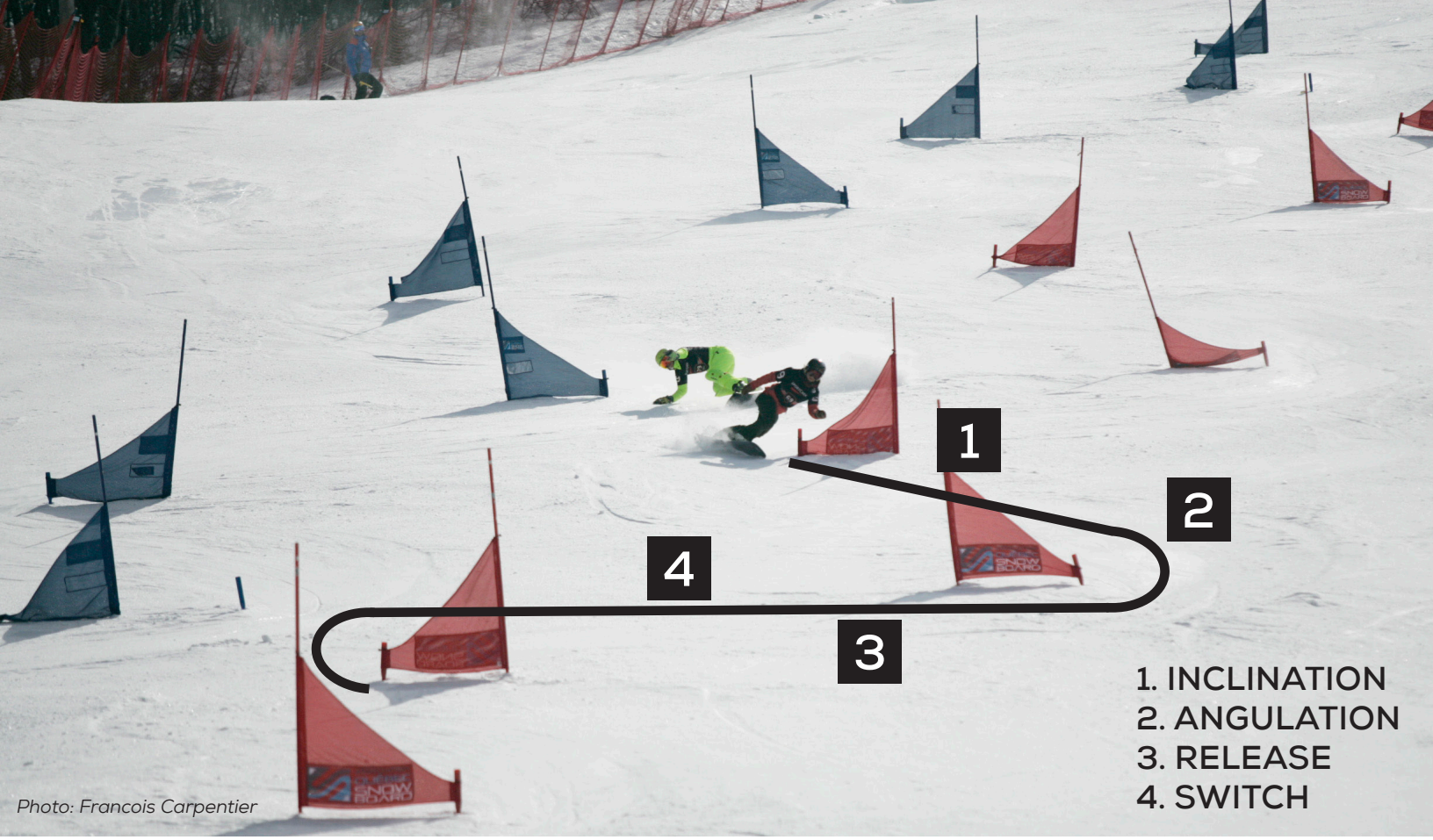


Photo: Francois Carpentier

5.3.2 SBX SPECIFIC TACTICAL APPROACHES

Coaches can help athletes understand the concept of tactics by using the phases of the turn as a tool for improving skill performance. The tactical approach to the three phases of a turn will help the rider understand:

- When and where to start the turn/maneuver/feature (timing)
- What to do in the middle of the turn/maneuver/feature
- When and where to finish the turn/maneuver/feature (timing)
- How to link turn/maneuver/feature (coordination)

It will help entry level riders to become more familiar with the following terms:

- Line – strategic direction and approach to ride into a feature/turn
- Turn Shape – open, closed, or something in between
- Edging – increasing or reducing edge angle for desired result
- Loading – bending or deforming the board
- Unloading or Release – the unbending of the board
- Board Speed – speed needed to achieve desired results
- Gliding – minimal resistance of the board on the snow
- Link/transition – what happens between turns/features
- Alignment – stacked body position over stance

5.3.3 FREESTYLE SPECIFIC TACTICAL APPROACHES

With most aspects of an individual trick based on technique, full runs tend to be the area most focused on for Tactics.

TACTICAL APPROACH

-Switch or Regular-
When doing a full run it is important to consider if a landing is switch, then the next trick needs to be switch, to avoid any reverts during the run.

-Direction of travel, feature based-
An athlete may want or need to land in a position that facilitates the approach of the next feature. This may create a tactical situation of direction of travel for approach or on takeoff

COMPETITION TACTICS

Most freestyle tactics come into play at competition.

-Trick or Run choice -
Deciding what tricks or full runs to do becomes more relevant the higher the level of competition and the greater the number of tricks that competitors can do. An athlete wants to win the competition with the lowest risk factor. For example, if all riders are doing 360's then a similar executed 540 will win, no need to attempt a 900.

-Feature Choice-
Many events have a small and large set of features. There is always the discussion of what scores will be awarded for which tricks on which size features. Easy tricks on hard features or hard tricks on easy features. In general athletes should do the best trick on the hardest feature that they can execute well. Beyond that watching what other competitors get scored will help develop the correct tactic. This may change per event!

-Managing Risk-
Choice of what trick to do when is important. Getting through to Finals may ensure a top 12 or top 10 finish. Choosing tricks that are "locked" is as important as knowing when to "go for it" and do the best trick that has any chance of success.

-Weather-
Mostly related to speed, weather tactics are important when adverse conditions slow or drastically speed up a course or create icy or dangerous or difficult to ride conditions. In these situations, the tactical decision could be that spins 180 less than your best may be acceptable, and the tactic of safety is always paramount.

-In relation to overall Strategy-
Seasonal or long term strategy may determine which tactics are used at an event. Is the event to achieve top ranking, then look to finish with best score. If it is to experience riding new or more difficult features under pressure, then choosing tricks that guarantee landing and experience success are more important.

There are many other situations that arise that require tactics. Always know why you are implementing a tactic. Be Tactical with your tactics!

6. SUPPORT ATHLETES IN TRAINING

6.1 INTRODUCTION

One of the most notable roles of a coach is supporting their athletes in training. Much like a schoolteacher preparing students for a standardized test, a coach prepares their athletes for the competitive tests at each event. Depending on the level of athletes you are working with (L2T or T2T) will depend on how you support your athletes on and off snow in a training environment.

As a coach working with a Stage 3: Learn to Train athlete, coaches will primarily focus on introducing athletes to healthy training habits, the importance of training and how training is a skill on its own. Another focus is ensuring athletes understand the importance of being a well-rounded athlete who participates in all competitive disciplines.

As a coach working with a Stage 4: Train to Train athlete, coaches will primarily focus on specialization of a discipline with an emphasis on strength and conditioning within your annual training plan. Focus should be placed on the refinement of skills on snow and training, rather than competitions.

The better a coach can prepare their athletes, the better the athlete will be able to perform when put to the test. Supporting an athlete in training is the summation of coaching skills explained in greater detail in the previous chapters. With an annual training plan in place, the coach is able to analyze performance against the seasonal goals and then implement very specific sessions that prepare the athlete for the demands of competition.

CRITERION: ENSURE THAT THE PRACTICE ENVIRONMENT IS SAFE	
EVIDENCE	Training(T) Evaluation(E)
-Surveys the session site for potential safety concerns. -Takes steps to minimize risk for athletes before and throughout the session. -Creates/presents an Emergency Action Plan (EAP) -Reinforce and teach appropriate competitive rules to enable a safe practice environment	TE

CRITERION: IMPLEMENTS AN APPROPRRIATELY STRUCTURES ORGANIZED SESSION		
EVIDENCE		Training(T) Evaluation(E)
	Activities are appropriate for the level of athlete (LTAD Stage) Ensure delivery of practice matches practice plan's goal(s)	TE
	Ensure equipment is available and ready to use	TE
	Demonstrate adequate use of space (terrain) and equipment	TE
	Dress appropriately for active coaching	TE
	Ensure activities contribute to development of skills, tactics, or athletic abilities	TE
	Maximize practice time to ensure athletes have appropriate duration, transition, and waiting times	TE
	Sequence practice activities to enhance learning or specific training effects	optional
	Adapt practice activities to provide an appropriate challenge	optional
	Make adjustments to the practice based on an analysis of athlete performance Breaks are taken as you the coach sees needed.	optional

CRITERION: MAKE INTERVENTIONS THAT PROMOTE LEARNING		
EVIDENCE		Training(T) Evaluation(E)
	Provide 1–3 key learning points in explanation or demonstration	TE
	Clarify key learning objectives and/or performance factors (feedback/instruction) with participants prior to engaging in the activity.	TE
	Ensure key learning points match sport's skill development model	TE
	Identify appropriate expectations for athlete behaviour and reinforce these expectations when appropriate -Provide feedback and instruction that clearly identifies what to improve and how to improve.	TE
	Promote a positive image of the sport and model the image to athletes and other stakeholders	TE
	Use respectful language towards athletes when providing verbal interventions	TE
	Maintain a positive outlook and acknowledge athletes' needs and thoughts	TE
	Ensure explanations are clear and concise and provide opportunities for athletes to ask questions	TE
	Use self or others to model desired performance	TE
	Analyze when to inhibit feedback to promote critical thinking	Optional
	Identify interventions that are evaluative, prescriptive, and descriptive	Optional
	Integrate and teach basic decision-making	Optional
	Integrate mental preparation strategies into practice	Optional
	Identify individual learning styles (auditory, visual, kinesthetic) and provide appropriate interventions to optimize learning	Optional

6.2 THE PLAN IN ACTION

Failing to plan is planning to fail. As coaches, the effort we put into developing the seasonal training plan and the individual sessions will be evident when it comes time to deliver the sessions. "Winging it," is often satisfactory and will get the job done, but if the athlete is to be a top performer, then the coach cannot take shortcuts. Supporting an Athlete in Training is putting your Seasonal Training Plan and the individual sessions into action. Supporting athletes in training is the fundamental responsibility of a Comp Intro and Comp Intro Advanced Coach, and includes:

- Providing a safe training environment
- Implementing an organized and planned session (from the season training plan)
- Analyze performance and make appropriate interventions to promote learning
- Effective Communication
- Explanation
- Reflect, Improve, Repeat.

6.3 PROVIDE A SAFE TRAINING ENVIRONMENT

"Good judgment comes from experience. Experience comes from bad judgment" -- Jim Horning

The safety of your athletes is essential; therefore, it is necessary to manage the risks your athletes will be exposed to during the season. The five main risk factors are:

- Environmental
  - Check the forecast and conditions
- Equipment
  - Create athlete accountability for equipment
- Terrain
  - Scope the terrain/features and make appropriate decisions
- Human
  - Limit the public interference (time of day/week, location, spotting)
  - Athlete characteristics (prep, behaviour, carelessness)
- Group Management
  - Keep the group together
  - Know how many athletes are in the group. Count when possible.
  - Ensure a starting point and finishing point is stated and understood for each drill.
  - Set rules to ensure athletes responsibility for self and group management.

Get in the routine of keeping tabs on these items on a regular basis to make sure that you can be proactive to unsafe situations in your training environment.

6.4 IMPLEMENTING A PLANNED SESSION

NIGHT BEFORE TRAINING ENSURE

- Batteries are charged (cell phone, camera, radios, drill, etc.)
- Board is prepared (tuned appropriately, bindings checked)

MORNING OF ENSURE:

- Check forecast, dress appropriately and adjust training plan to suit
- Arrive on time to meet athletes
    - Set the tone of the day
    - Establish plan for the day.
    - Feedback, goals of the day, are the athletes dress appropriately? Is their equipment prepared?

DURING YOUR SESSION ENSURE:

- Maximize practice time by appropriate warm-up and moving into the main part of the session before the terrain deteriorates and athlete's energy levels deplete
    - Adapt practice activities to provide an appropriate challenge
- Follow through with proper sequence of skill development in this, and subsequent sessions. Analyze the performance of your athletes and make the necessary adjustments as needed. You may need to step back and come up with alternate routes around any road blocks.
- Have a back-up plan ready if you planned session cannot happen, ie, pipe/course is closed, park is icy, but the hit run is going off!!!

POST SESSION ENSURE:

- Reflect on the delivery of your practice, did the session that you ran match with the session that you planned? Did you achieve the goals of the session? How will you ensure that you will for the next session?
- Are your training sessions contributing to your athletes skills, tactics and athletic development? Are you on track? Do you need to go back and adjust your training plans?

6.4.1 THE CONTINGENCY PLAN

"The best laid plans of mice and men go awry" – Robert Burns

Regardless of how well you prepare for any given training session, it is likely that you will need to have a few backup strategies to help segue between the planned times. Weather, trail closures, or some athletes just not arriving to the session can change the plan for the day. Keeping the goals of your microcycle in mind, it is easy to for an experienced and prepared coach to adjust the training day to continue to build towards the seasonal goals.

6.5 INCLUSION AND INTEGRATION

The value of participation for para-snowboarders:

- Snowboarding can open a new world of access for people with a disability; they become stronger, gain more endurance, and are generally healthier and more confident outside of sport
- These benefits are not limited to the participants themselves; ultimately, everyone gains from the inclusion of persons with a disability in snowboard programs
- The key to a successful integrated snowboard program is to get everyone involved and helping each other out

Integrated snowboard programs:

- For para-snowboarders, it is recommended at first to set achievable goals while keeping the sessions challenging
- This should ensure progressive snowboard skill development and encourages athletes with a disability to meet the requirements of the snowboard competition to the best of their ability
- Each athlete will respond and adapt differently; it is important to take an individualized approach when first engaging athletes into programs
- Remember, athletes will not always benefit from the same teaching techniques and may learn best in different ways. They key to success is to adapt!

Adapting snowboarding

- The most important this to keep in mind when adapting snowboard programs to athletes with a disability, whether it occurs on a recreational level or competitive level, is to adapt only what is necessary
- Snowboard techniques and equipment should be the only thing that is being adapted NOT the athlete
- When making adaptations, it should be kept as close as possible to able-bodied snowboarding (A snowboard is minimum 16cm wide at the waist)
- Key parameters that can be used to adapt snowboarding include: Space-training venue (e.g. length of slope, grade of slope, snow type, etc.), speed of execution-coordination of gross and fine motor skills, equipment, competition formats, rules and classification

Photo: Evan Applegate

6.6 MAKING INTERVENTIONS

An intervention can be a step back, sideways or even forward in the development of the skill; essentially the coach applies one or more strategies to assist the athlete in overcoming the issue.

It is important to know your athletes so that you can choose the most effective types of intervention. While you may be inclined to stick to one or two types, ie drills and repetition, choose an intervention strategy that best suits the situation as well as the riders learning style.

EFFECTIVE COMMUNICATION

Communication skills will allow a coach to establish a good working relationship with riders.

Personal Communication

- Know yourself, both as a coach and as a person.
- Know your preferred communication style (analytical, dynamic, pleasant, expressive), and choose the appropriate one's) for your riders.
- Be aware of the importance of the nonverbal aspects of communication: Riders notice slightest movements and gestures. Non-verbal language represents around 80% of all communication. Verbal language must not contradict non-verbal language; rather, they should be complementary.
- Know what to expect in typical situations faced in sport. For example, stress during competitions.
- Create opportunities to listen to and communicate with other people.
- Pay attention to and take genuine interest in the person you are speaking to.
- Be prepared to clarify and repeat whatever is said often during the season. You may have to say the same thing in several different ways and use different words before the message is truly understood and acted upon.
- Active listening: ask for clarification.

Ambient Communication

- Create a positive ambiance based on confidence, be patient, tolerant, and show empathy towards others.
- Create a positive environment for communication (appropriate location, absence of noise, discreet, etc.). If it's not possible to spend time with the other person, make an appointment with him/her for another time, for example, after the session.

Interpersonal Communication

- Respect the differences and particularities of every individual.
- Be open with other people, right from the beginning of the relationship.
- Clearly identify expectations in front of riders.
- Describe how to meet these expectations.
- Describe the attitudes and behaviors you expect to see (a code of behavior).
- Communicate a coherent and relevant message in terms that they understand.

Explanations
To have effective tasks in a session, riders must understand what they are to do and how to do it.

Tips for an effective explanation:

- Tell the riders the object of the exercise or drill.
- Give the riders some cues or reference points (what to look for or feel while performing). Effective cues are short, clear, simple and numerous (two or three).
- A cue is a precise piece of information that enables the rider to control a movement. It must be observable by the coach and easily understood by the rider. There are two types of cues: external and internal. An EXTERNAL CUE can be seen or heard by the rider. An INTERNAL CUE is perceived internally by the rider (kinesthetic sensations).
- While executing the movement riders should pay attention to or concentrate on something external to their body (e.g., a target), or the expected outcome of their movements, and not too much on how the movement is being performed or on what they feel.
- Always show and tell the rider what successful performance will look and feel like.
- Use appropriate words, movements, or visuals (if possible) to take into account the preferred learning style of each rider (visual, kinesthetic, and cognitive).

Photo: François Carpentier

6.7 ANALYZE PERFORMANCE

Most coaching interventions originate from an observation of the athlete(s) and an analysis of their performance.

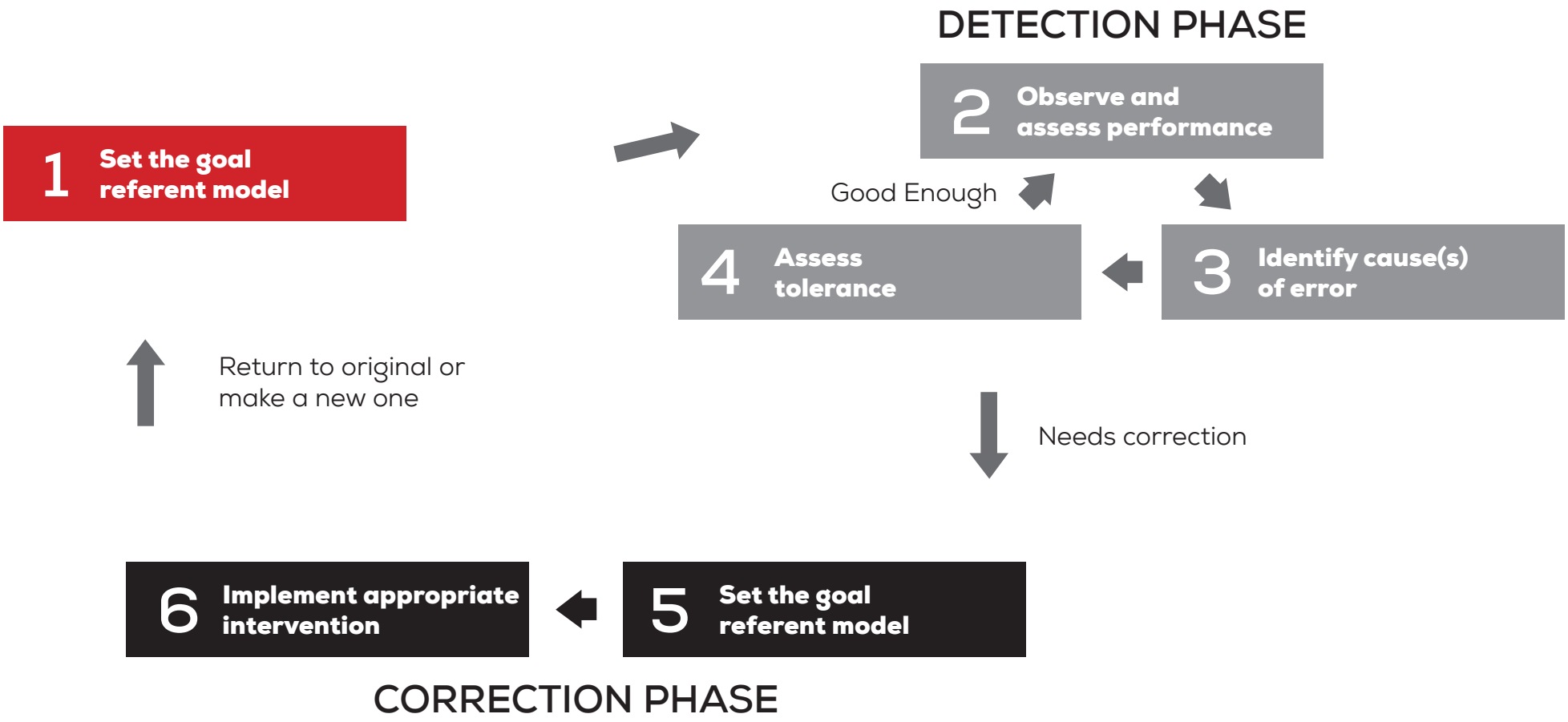


Figure 6.7: CSCP Detection & Correction model

6.7.1 THE SIX DETECTION & CORRECTION STEPS:

STEP 1: SET A GOAL (REFERENT MODEL)

Create a reference model for the skill you are looking to analyze. This model is the image in your mind of the expectation you have for the athlete performing the skill.

In a box: SPEED L2R
Ride Anywhere (Training Age 0-2 years)
Gross motor skills acquisition: Stance - Balance - Timing- Coordination

1. Learning to find balance and stability:
   - The neutral position as the most stable position
   - Initiation of the turn with hips inside of the turn followed by knee movement and then feet
   - Equal weight on both legs, less and less front foot pivot towards middle of this stage
   - Up-weighting movement coordinated with arms
   - The J shape and C shape turn

2. Develop: demonstrating & duplicating various shapes and sizes of:
   - Turns
   - Airs

3. Consolidate stability over changing snow, features, steepness, light, and weather
   The referent model will vary from very basic tricks when entering the stage. These skills are based on a rider who is exiting the stage.

Rotations around vertical axis:
- Rotations up to 360s
- Cab spins
- Straight airs
- Air to fakie
- Alley oops

Grab all spins:
- Front and back hand
- Toe and heel edge
- Front and back side wall

Switch and Regular

Pipe skills:
- Drop in both walls on the uphill edge
- Balanced body position across the flat bottom
- Take off and land on uphill edge
- Demonstrate a variety of grabs with gradual amplitude

Park Skills:
- Switch take off
- Remain stable on take-off, during air and landing
- Gap jumps
- Rotate switch and regular
- Slide intermediate rails and boxes
- Demonstrate a variety of grabs

DETECTION PHASE (STEP 2 TO 4)

You will be required to analyze each athlete's performance and pinpoint the cause of riding difficulties. Based on your analysis, you will set performance goals and plan activities that will challenge and improve the lacking skills. It is important to understand the difference between watching (observation) someone perform a trick and analyzing that trick.
An analysis is a closer, more detailed look at the biomechanical aspects of the trick being performed. You are no longer looking at a snowboarder spinning a front side 3, rather you are looking at a "skeleton" creating a movement.

This process incorporates the studies of biomechanics and physics, the greater the understanding that you as a coach have of these studies, the easier the analysis of movement will become.

Photo: Ilanna Barkusky

STEP 2. OBSERVE AND EVALUATE

Use the performance factors and the skills concept along with the six step Detection and Correction model to make changes to an athletes riding. When observing performance determine where the athlete is looking, evaluate the snow (spray, turn shape, line), board performance, and finally evaluate the body position.

Continue to refer back to your reference model. Evaluate by asking yourself , "Does my athlete meet the goal of my reference model?". If not, move to the next step, identifying potential causes of error.

STEP 3. IDENTIFY CAUSE(S) OF ERROR

Use the six performance factors to analyze movements.

THE SIX PERFORMANCE FACTORS (EEPPTT)

Consider each factor before jumping onto the technical. See what needs to be changed, what you can change, and if you can't change it, move on to the next performance factor.

1

EQUIPMENT
Consider equipment as a factor affecting the performance. e.g. equipment may be damaged, not fit, or not be right for the activity.

2

ENVIRONMENT
Consider the environment, conditions that could lead to change in performance, or inconsistencies, e.g. surface, weather, lighting etc.

3

PSYCHOLOGICAL
Factors that are either internal to the rider (fear, motivation, interest) or thought processes used towards the task (lack of understanding, confusion, concentration).

4

PHYSICAL / MOTOR
Consider that physical abilities may be insufficient for the success of a task e.g. strength, stamina, flexibility, balance, coordination, etc.

5

TACTICAL (GOING PLACES)
Choice of speed and line relating to the overall strategies enabling success.
Speed and line:
- for 1 jump,
- for 3 consecutive jumps, 360 in middle
- for BX burm to jump
- for carving black diamond pitch.

6

TECHNICAL
The execution of the movement. e.g. identification of errors at initiation, execution, completion.

STEP 4. TOLERANCE ZONE

Goal Vs Performance:
In this step, the coach considers whether the potential causes of error isolated exceed the tolerance level identified by the referent model, and whether an intervention is required.
The notion of tolerance can be viewed as: " The gap between the observed performance and the intended outcome ". For example, Landing a trick 50% of the time may be acceptable initially upon increasing the demands of a task, but a success rate of 75% might be expected after 4 weeks of training; or refinement of a certain movement.

Upon assessing the tolerance there are 2 paths to consider:
No correction is needed. potential cause(s) do(es) not exceed the identified tolerance, and no corrective intervention is warranted. Review your goal.
or
Yes, a correction is needed. The potential cause(s) exceed(s) the identified tolerance and a corrective intervention is warranted. Proceed to the correction phase.

CORRECTION PHASE (STEP 5 & 6)

Upon gathering or confirming performance evidence in the Detection Phase, the coach moves into the Correction Phase. During the Correction Phase the coach will determine the extent to which an intervention may be required and the type of corrective measure that best targets the identified cause(s). The key steps in the correction phase are as follows:

STEP 5. SELECT AN INTERVENTION STRATEGY:

There are many different approaches coaches can take towards how they can intervene. Here are four coaching strategies that can be used:

1. Whole - Part - Whole
Description: Observe your riders (performing a trick or freeriding) in its entirety. Decide which portion of the skill needs to be developed further for their performance to improve. Do one or two activities (more basic tricks, change the environment) which will develop that portion of the skill. Then have the riders re-attempt the initial skill.

Advantages:
- Very specific to the individual athletes
- Provides lots of mileage
- No need for prior knowledge of the athlete and their riding level or style

Sample Example:
- Watching a rider do several airs-to- fakie in the pipe, you decide they need to work on drifting further down the pipe.
- Demonstrate and have students try a series of airs-to- fakie on a hip while trying to reach the far end of the landing.
- Have the athlete retry the air-to- fakie in the pipe.

2. Guided Discovery
Description: Coach sets a goal for the session in his/her head, based on the needs of the group. The athletes do not know the intended goal. The coach guides them towards the riding feelings and movements of the intended goal. Questioning the athletes about the sensations they felt will involving them in the learning process. If possible, guild the athletes to come up with the solutions to riding problems on their own with your "guidance".

Advantages:
- Good with large groups
- Provides lots of mileage
- Also good for experiential learners, children and hyperactive students

Sample Example:
- Ride over box with stiff legs
- Ride over box with flexible legs
- Ask questions "which felt better?" and "which style of riding gave you the best balance?"

3. Building Block
Description: The Building Block approach is a series of small tactics building on the previous. Once the athlete is capable of performing one step, they are ready for the next.

Advantages:
- Good for analytical students
- The step by step approach calms apprehensive athletes and athletes with confidence issues

Sample Example:
- Spinning a 360 on snow
- Spinning a 180 in the air
- Spinning a 180 and sliding out to complete the 360
- Spinning a 360 in the air

4. Story Line
Description: A theme session is based on a skill, tactic or ability level. To make a more interesting session, try creating an alternate world in which to run the session.

Advantages:
- Good for young groups, fun groups or experiential, hyperactive and/or disinterested riders
- Provides lots of mileage

Sample Example:
NINJA GAME (ANALOGY) – Seatbelt Grab session
- Introduce the future samurai warriors
- Explain the samurai sword that they are riding and the different ninja moves:
  Frontside shifties are the ultimate sword stroke
  The karate chop with the front hand towards the toe edge of the tail ensures that the enemy won't be coming back.
- Chop down some enemy moguls for practice.
- Training: Students experiment sneaking up on moguls
- Advanced (black) ninja tactics: The Flying Touch of Death *The apprentice ninja must have first mastered the ultimate sword stroke and the karate chop. While flying above the enemy you must combine the ultimate sword stroke with the karate chop. When the karate chop touches the tail of the board it becomes the "touch of death".
- Battle: The apprentices have now reached black ninja status and thus must protect their homeland from enemies. Generally these cowardly enemies can be found hiding just • behind rollers or the lip on cut-outs/hips/spines or even on the backside wall of the pipe.

STEP 6. IMPLEMENT APPROPRIATE INTERVENTION

Making Interventions that promote learning. Drill based coaching is a key Comp Introduction Intervention.

7 TYPES OF INTERVENTION	
TYPES OF INTERVENTIONS	BEHAVIORS / ACTIONS BY COACH
Inhibiting	Do nothing. Shout, rebuke.
Repeating	Repeat instructions. Demonstrate or repeat previous presentation
Explaining	Explain how to do it right (verbal or reference point). Question the rider.
Helping	Reassure, encourage. Have the rider start again
Adapting	Use different equipments or practice areas. Reduce difficulty level or give more time.
Drills	Coach prescribes a drill.
Questioning	Coach questions the rider.

Why is it used?

- Muscle trains more than cognitive
- Keeps riders moving
- Provides a full group effort
- It is more fun.

Detecting similar errors in riding or tricks of riders in the same group, create a "drill" that makes the rider aware of the problem, teaches them the feeling of the correct way, or re-defines a movement. Drills need to be

a) specific to solving the problem
b) easier than the original trick
c) require mileage
d) safe
e) fun

Forms of drills:

- The instructor drill: This drill form is the "follow me, do what I do" instructor drill form.
- The "Focus on this" drill: The rider has an external focus be it a snowman on the pipe or a lift tower on a spin
- The Feel This drill: Drill that create a "Feeling" like dropping the body down the fall line in the pipe.
- The "Do this drill" : Drills that have completed skills, or are a good combination of other skills "the 3to3 run drill in the pipe"
- The "You tell me" drill: Try this, let me know what you see, what it does to your turns, to your spins.
- Got a drill? Share your drill.

6.8 FEEDBACK

- Give specific and constructive feedback that leads riders to think.
- Avoid sharp criticism, as it is well known that this can have a negative influence on learning and the development of the rider.
- Do not use stereotypical messages, which often become repetitive and little more than habitual statements.
- Sometimes do not give any feedback. The quality and credibility of the feedback are more important than the quantity.

It is always the quality and quantity of feedback that determines its effectiveness. The rider needs to be open to hearing it, and near enough to hear you. Let the riders practice without always interrupting them. The more talk, the less riding! Repeating the same general encouragement. (e.g., "That's great!", "Keep going!") is not effective feedback.

Specific information will promote acquisition and development of skills. In the case of motor skills, a demonstration (i.e. non-verbal feedback or the execution of a very precise movement) is often useful feedback to give to the rider. Feedback given to the whole group is often more effective to more riders.

THREE TYPES OF FEEDBACK

3 TYPES OF FEEDBACK		
TYPES	DEFINITIONS	EXAMPLES
Evaluative	The coach assesses the quality of the performance. He/She makes some kind of assessment or judgement.	"Not bad" "Nice work bro!" "Not stellar"
Prescriptive	The coach tells the athlete how to execute the skill next time.	"Go higher" (general) "Bend your knees more" (specific)
Descriptive	The coach describes to the athlete what he/she has just done.	"The build up was too slow" (general) "Good leg extension" (specific)

Assessing fitness, coordination and skill

- An assessment of the physical, cognitive, and social aspects of para-snowboarders is essential in order to provide them with adequate support and sound programming
- Athletes should be assessed based on the demands of snowboarding
- Use a process similar to that used with able-body, but be creative! It is all about adaptation

6.9 ASSESSING FITNESS, COORDINATION AND SKILL

- An assessment of the physical, cognitive, and social aspects of para-snowboarders is essential in order to provide them with adequate support and sound programming
- Athletes should be assessed based on the demands of snowboarding
- Use a process similar to that used with able-body, but be creative! It is all about adaptation

DISABILITY PROFILES

The athlete's disability will fall under one of five profiles. Acquire information about their disability prior to the lesson. Knowing the athletes profile will help you in getting to know your student and the generic information regarding their disability. Use this information as a guideline and remember that each athlete will be different, even if they have the same disability. When you meet your student, be prepared to adapt to their individual needs. You will continue to get to know them and their disability by going through an evaluation (next section).

The different profiles are:

1) Physically Impaired

Athletes with disabilities that affect the muscular and/or skeletal system. Impairments include amputation of one or more extremities, limited ROM or locked joints, lateral asymmetries, low muscle tone or tightness of muscles, lax ligaments, arthritis and/or various physical deformities. Some disabilities with physical components include: Arthritis, Amputees (above knee, below knee, above elbow, below elbow), Cerebral Palsy, Polio and Post Polio Syndrome, Multiple Sclerosis, Muscular Dystrophy, Spina Bifida, Hemiplegia, Spinal Cord Injuries (Incomplete Para and Incomplete Quad).

2) Cognitively Impaired

Athletes who have delayed mental processes. Disability may be mild or profound due to congenital defects, pathological or traumatic accidents. Disability may affect learning, comprehension, perception, concentration, memory, judgment and/or reasoning.
Some disabilities with cognitive components include: Alzheimer's disease, Autism Spectrum Disorder, Traumatic Brain Injuries, Cerebral Palsy (CP), Downs Syndrome, and Learning Disabilities.

3) Visually Impaired (VI)

Athletes who have limited vision and/or complete vision loss that cannot be corrected with glasses or contact lenses. Lack of vision may be due to congenital defects, pathological or traumatic accidents. The range of vision can be but not limited to, partially sighted, peripheral vision, spotty or blurred vision, tunnel vision, poor depth perception, or only seeing shadows.

4) Hearing Impaired (HI)

Athletes who have limited hearing and/or complete hearing loss due to congenital defects, pathological and traumatic accidents. Damage to the external (outer) ear, the middle ear and the internal (inner) ear may affect the function of both hearing and balance.

5) Multiple Impairments

Not all disabilities will fit entirely within a single category. Many disabilities can involve both cognitive and physical aspects. Some athletes will have two or more disabilities, which fit into the categories above. Many athletes who have multiple disabilities can learn to snowboard. The instructor needs to be aware of each disability and how it affects the student movement ability and learning style.

6.10 EVALUATION

A student evaluation begins in the welcoming stages prior to the start of the lesson. It includes a Basic Body Movement Assessment (BBMA) and continues all the way throughout the lesson. The student's strength and endurance, including muscular, cognitive or visual abilities, may change with physical or cognitive exertion. Changes in weather and snow conditions can also affect performance considerably. Continually evaluate and adapt the lesson plan to address the student's needs.

During an evaluation, the instructor should acquire the following information:

1. Information concerning the disability including aspects that may effect snowboarding (i.e. Left vs. Right side asymmetries, strong side vs. weak side, leg position while standing and walking).
2. Identify medications or medical issues and potential side effects that could effect learning to snowboard.
3. The student's strengths, weaknesses, and motivations. Does the student participate in other physical activities while standing?
4. Ask the student about their goals. Help the student develop realistic goals and share the lesson plan with the student.
5. Determine if the student has equipment preferences or if certain adaptive aids have worked in the past.
6. Inquire about teaching techniques and learning strategies that have been successful in previous lessons or in other activities.
7. Evaluate safety issues.

Additional Evaluations for Cognitively Impaired Students:

- Assess the student's ability to understand direction and follow instruction.
- Assess physical strength, balance and inquire about tolerance for activity.
- Determine emotional maturity, developmental age and chronological age.
- Speak to family members and/or caregivers to acquire insight about the student's abilities and behavioral patterns including likes (motivators) and dislikes. Find out if they do best with following a schedule or using a contract.

Additional Evaluations for Visually or Hearing Impaired Students:

- Assess the amount of vision, lack of vision or any sensitivity to the eye, of any VI students
- Assess both indoors and outside. This will help to identify any differences in vision that occur with dull, low light and bright light.
- Assess the student's senses of feeling and hearing is important for VI students.
- Determine how well the HI student can hear and assess the best way to communicate.

Photo: Evan Applegate

BASIC BODY MOVEMENT ASSESSMENT (BBMA)

A Basic Body Movement Assessment (BBMA) can be used to determine if an athlete has the basic skills needed to participate in snowboarding. The BBMA will help you gain a clear picture about the student's mobility. Athletes that want to attempt snowboarding should have a minimum beginning skill set and range of motion. Stand up skiing, with 2 skis that are independent and mobile, offers a large base of support and can be more forgiving. Adaptations are available for skiing that allow for practically anyone to enjoy sliding on the snow even if they have little control over physical movements. When strapped into a snowboard the base of support is locked in a fixed position, which decreases the maneuverability and increased the demand on balance and motor skills. This can make the beginning stages of snowboarding more difficult.
In the beginning stages of snowboarding, students are more likely to fall down. One fall type that we want to minimize is the downhill edge fall known as the 'scorpion' on the toe side or the 'head banger' if you are on the heal side. Both of these falls are high risk for injuries and are not only dangerous, but can steer students away from the sport in the beginning phases of learning. After some basic skill mastery, the student will seldom fall in this manner and will progress into the sport of snowboarding at a rapid pace.

The BBMA is a guideline and can be used to determine if an athlete has the physical ability needed to safely learn snowboarding and should be taken before you commit to teaching a student to snowboard.

BBMA

Participant should be able to:

1. Stand up in an athletic stance on a flat surface for a 30 second duration. Ankles, knees and hips flexed with weight equally balanced on both feet.
2. Rock laterally from side to side, shifting weight from one foot to the other while lifting the opposite foot of the ground 1-2 inches. Repeat 10 times.
3. Stand in an athletic position with feet shoulder width apart, raise up on toes for 2 seconds, followed by balancing on heels for 2 seconds. Repeat 10 times.
4. Stand in an athletic position with feet shoulder width apart, rotate your arms and shoulders 65 degrees or more across the lower body to the right and hold for 10 seconds. Repeat rotating the arms and shoulders to the left for 10 seconds.

If a student cannot perform the basic skills outlined in the BBMA because they are physically unable, it may be best to suggest a different adaptive snow sport and encourage them to work on the skills with a physiotherapist or trainer before they begin learning to snowboard.

In some cases, it may still be possible to provide a fun and safe introduction to snowboarding with teaching aids or hands on approach. For students who are likely to have more falls, a modified lesson including the use of safety equipment may be possible (Protective equipment page 31). Consider the size and weight of the athlete before you commit to this lesson. Keep the students safety and your own safety in mind.

Remember:
Goals have to be realistic and achievable, but not limiting for the individual.
The slogan "See the potential, not the limitations" should apply.

CANADA
PARA SNOWBOARD

6.11 PARENTAL INVOLVEMENT

- Coaches who encounter overprotective parents may communicate that their child has the same rights as anybody else to participate in snowboarding and enjoy the challenges and risks
- A parent's involvement is not necessary in most cases, but is a great benefit to the snowboard program when offered
- In para-snowboarding , parents should be aware that if they can spare the time, their services could be extremely valuable to a coach
- Always be transparent and honest when communicating with parents about their child

Photo: Evan Applegate

7. SUPPORT ATHLETES IN COMPETITION

7.1 INTRODUCTION

Most athletes in the Learn to Train (stage 3) phase will be entering their first snowboard competition. It is important that this experience is positive and fun so that they continue in competitive sport and develop a love for snowboarding and competing.

Competition for the Train to Train, stage 4 athlete is meant to test the quality of their training. To support the competitive experience, the Competition Introduction Advanced Coach must seek out appropriate events that will challenge the athlete and help in their development.

CRITERION: PREPARE FOR READINESS IN COMPETITION
EVIDENCE
Ensures that necessary equipment is ready, and is in good, safe condition
Ensures that venue and competition rules are accounted for to enable a safe and positive compeition environment
Clarifies competition rules before the competition and communicates appropriate information to athletes and other stakeholders
Communicates an athlete competition plan or schedule that identifies athlete expectations before, during, and after the competition
Identifies performance and/or process goals for competition
Develops a competition plan that outlines basic strategies or tactics for achieving desired performance during competition
Ensures that tactics and strategies are consistent with rules of competition
CRITERION: HELP ATHLETES TO BE MENTALLY PREPARED FOR COMPETITION
EVIDENCE
Provides athletes with positive feedback that identifies what an athlete needs to do for greater performance and how to do it
Uses interventions that provides strategic information (event specific), manages athletes, makes adjustments for equipment, and implements mental strategies
Reflects upon and implements confidence and skill-building interventions during and after the competition
Assesses the timing and interventions made during the competition as appropriate and can justify which interventions may be repeated or modifies in the next competition situation
Presents a post competition assessment of performance and provides a link to the goals or objectives of the next practice or competition
Assists athletes, during and after the competitive event, to reflect upon and choose successfulstrategies for subsequent performances
CRITERION: HELP ATHLETES TO BE MENTALLY PREPARED FOR COMPETITION
EVIDENCE
Works with athletes to identify appropriate performance goals and objectives

CRITERION: GIVE BASIC NUTRITIONAL ADVICE
EVIDENCE
Takes appropriate measures to ensure athletes can remain hydrated during the competition

7.2 PREPARE FOR READINESS IN COMPETITION

Readiness in competition is the ability to perform at 100% when it matters. Most of the hard work should have been done leading up to the moment of competition with careful planning and execution of the seasonal training plan. Competition shows how well the athlete (with coach support) has prepared.

TRAINING AGE

The stage 3 and 4 athlete (L2T and T2T) has approximately 0 to 4 years of training experience.

RECOMMENDATIONS

Stage 3: 40 days on snow per season: 6 days in competition or simulation combination of all technical aspects (RIDERS Speed & Style events)
Stage 4: 50-70 days on snow per season: 5-7 days in competition simulation and 6-8 days in competition.

Training ratio:
Stage 3: 85% training & freeriding to 15% competition ratio
Stage 4: 75% training & freeriding to 25% competition ratio

On snow quantity and intensity:
Stage 3: 1 to 3 sessions/ week with low intensity
Stage 4: 4-6 sessions per week with low intensity, high volume

Complimentary sports:
Stage 3: The athlete needs to have 4 to 6 sessions/ week
Stage 4: Average duration of sessions: 90 to 120 min

Competition format:
Stage 3: If less than 15 years old participate in hybrid events/ skills event
Stage 4: Ample training at venue prior to competition. Combination of fun and professional formats.

Competition goals:
Stage 3: Fun with air & speed sense through a variety of challenges
Stage 4: Enjoyment/building towards provincial team selection.

Competitions venues:
Stage 3: If less than 15 years old, riders participate in inner & inter club rail/slope style jams, club speed events.
Stage 4: Regional rail and slopestyle jams/comps, provincial games, provincial championships, FIS races and Jr Nationals, Junior Worlds, multi-sport games.

AGE-STAGE SPECIFICS

The RIDERS Speed & Style Event: If less than 15 years old
RIDERS introduces participants to competitive snowboarding through a Snowboard Cross type of event, slopestyle or PGS. Snowboard Cross is timed event over a course with a variety of "features", such as turns, berms (or banked rules areas), jumps, and rollers.

At the high performance level, SBX events have four riders on the course at the same time. The RIDERS Speed & Style event uses a "sling- shot" format (one rider on the course at a time and the features are designed to facilitate the development the 'ABC" fundamental snowboard skills; Agility, Balance, and Coordination of jumping and turning at speed. The RIDERS Speed & Style event format combines all the technical aspects needed for an athlete at this stage of development.

The FIS Event (Including North American Cup Events & Nor-Am:13 years old and up for Halfpipe & Slopestyle and and 15 years old and up for SBX, Alpine & Big Air)

The athlete needs to have:
- Provincial snowboard association membership
- FIS license
- Athlete competitive insurance

The coach needs to have:
- Provincial snowboard association membership
- Liability insurance
- Knowledge of the FIS rules

The Pro Event
The athlete needs to have paid their entry fee and complied to the requirements of the event. The coach needs format and rules.

Photo: Inga Bailey

7.3 PREPARING FOR THE COMPETITION

The following is a list of "big picture" responsibilities leading into event day. As you gain more experience as a coach, this list will get surely get tweaked and refined.

7.3.1 THE COACHES RESPONSIBILITIES

- Review athlete equipment and ensuring it is appropriate for the discipline, level of competition and is in safe condition.
- Research the competition rules and format if available. Ensure they are well understood and athletes have been prepared for tactics required for that format/type of event. If applicable, check and double-check athlete eligibility.
- Reflect upon the format and competition rules and ensure it will meet the developmental level of the athletes and is safe for their level of development.
- With the athlete, establish SMART performance and process goals for the event.
- When preparing tactics and strategies for the event, check and ensure they fit the level of development and are consistent with the rules of competition.
- Communicate the basic rules and format of the competition to the athletes so they are able to mentally prepare prior to the event. For example, if it's a regional alpine event that will be a two run qualifier, this should be communicated to athletes and assistant coaches prior to the event.
- When communicating travel and event day plans/scheduling to parents and athletes, ensure that athlete and coaches expectation are well communicated.
- Athletes should be told what their responsibilities are before, during and after the competition and what the expectation of coaches are during these periods so they are confident in their support system.

7.3.2 COMPETITION CHECKLISTS:

The following checklists are useful tools for athletes, parents, and assistant coaches to ensure that everyone knows who is responsible for what.

A THE COACH'S CHECKLIST:

It is the coach's responsibility to bring...

- ☐ A plan
- ☐ A well tuned snowboard as well as bindings & boots in good condition.
- ☐ Snowboard hardware and tools
- ☐ Clothing appropriate for all possible weather.
- ☐ A video camera & charger (if available)
- ☐ Radio's and charger (if available)
- ☐ Training gates (if appropriate)
- ☐ Emergency contact & health information for all athletes
- ☐ A cellular phone/charger
- ☐ Cash for protest (if necessary/appropriate)
- ☐ Pen/Pencil and paper in case of a protest.
- ☐ Contact details for PSO office, CS office, etc.

At the event location, the coach will:

- ☐ Ensure athletes can access appropriate foods at all time and advise athletes in food selection if grocery shopping.
- ☐ Communicate regularly with all chaperons, assistant/head coaches
- ☐ Ensure the safety, comfort and well-being of every athlete as much as possible.
- ☐ Transport athletes (or arrange transportation) to and from the practice and competition areas.
- ☐ Be accessible to the athletes (in person or by phone) at all times.
- ☐ Assist athletes with board preparation if necessary.
- ☐ Attend all coaches meetings (duties at TC Meetings as follows):
  - o Check the board for athletes, FIS numbers and points (if applicable)
  - o Note schedule and changes
  - o Note weather conditions
  - o Note bib and start number for all athletes and collect bibs.
- ☐ Post TC Meeting:
  - o Set up and conduct concise athlete meeting.
  - o Collect and distribute competition & practice bibs (could be just before event too).
  - o Communicate with athletes weather conditions, tuning plans, training/competition schedules, etc.
  - o Answer any and all questions

On Competition Day, the coach will:

- ☐ Arrive at the competition site in plenty of time
- ☐ Meet with athletes in plenty of time to access training/inspection
- ☐ Ensure athletes know schedule and what to do after each run
- ☐ Review tactical plans with individual athletes
- ☐ Where possible (asst. Coach) revise tactical plans based on changes to course etc.
- ☐ Provide EEPPTT support
- ☐ Keep everyone safe, focused and ready (ideal performance states)
- ☐ Be aware of protest protocols and deadlines
- ☐ Review how/when to protest with athletes (ideally learned earlier in season)

B THE ATHLETE'S CHECKLIST

It is the athlete's responsibility to bring...

- ☐ A well tuned snowboard as well as bindings & boots in good condition.
- ☐ Extra hardware for bindings including ladders, screws, etc.
- ☐ A screwdriver with bits that fit all parts of bindings.
- ☐ Appropriate waxing equipment including; waxes appropriate for the weather and snow conditions, an iron, a scraper, a texture brush.
- ☐ Clothing appropriate for ALL weather.
- ☐ Warm gloves & extra gloves
- ☐ A water bottle/camelback
- ☐ Goggles with lenses appropriate for any possible conditions.
- ☐ On hill snacks for event day.
- ☐ A backpack.
- ☐ Sun block.

At the event location, Athlete's will:

- ☐ Adhere to the team's Code of Conduct both at the location and when traveling to and from the event location
- ☐ Adhere to timelines set by the coaches (ie. Departure times, meal times, etc)
- ☐ Prepare his/her board for competition and training days including; Waxing, sharpening, scraping, and texturing.
- ☐ Ensure all other equipment is prepared and fully functional for practice and competition days.

On Competition Day, Athlete's will:

- ☐ Either bring a backpack with or give your coach all necessary competition day equipment including:
  - o Water bottle/fluids
  - o Scraper
  - o Snacks/Meal
  - o Layers
  - o YOUR Competition/Training BIB!
  - o Additional board-prep supplies as needed
  - o Ensure athletes are aware of how to protest

C PARENT/CHAPERONE CHECKLIST

It is the parent's responsibility to bring:

- ☐ Their athlete! Unless arrangements are made with the coach/others
- ☐ A supporting and positive attitude

At the event location, the parent will:

- ☐ Encourage their athlete to stay with the team and take part in all team activities
- ☐ Communicate with the coach all necessary scheduling details (travel, accommodation…)
- ☐ Adhere to all team policies/code of conduct if they are staying with the team.
- ☐ Keep the best interest of the team and athletes in mind.

On competition day, the parent will:

- ☐ Be in the finish area to encourage and praise the athletes
- ☐ Shuttle clothing/bags etc to the finish area if necessary
- ☐ Support the athletes and coaches as necessary/required.

7.4 MAKE INTERVENTIONS DURING AND AFTER EVENT

By the time an athlete is at the event, a major portion of the coach's work has already been completed. At this point, coach interventions occur to keep the athlete on track to execute "the plan". This is going to look quite different from athlete to athlete, however, there are some guidelines that can help ensure that the athletes are on top of their game when the time counts. The following tables show some of the possible interventions that an athlete may need to perform at their best.

PRE COMPETITION

- Monitors and provide guidance for nutritional and hydration strategies for competition.
- Ensures athletes perform appropriate physical warm-up.
- Ensures athletes perform appropriate mental warm-up.
- Works to identify appropriate performance and process goals.
- Identifies tactics and strategies that are consistent with athletes' stage of development and yearly objectives, and reflect an analysis of both athletes coached and opponents.
- Identifies tactics and strategies that are consistent with the rules of competition and principles of fair play.
- Explains tactics and strategies in a way that is clear for the athletes, and checks for understanding.
- Manages own anxiety/stress level in an effective way, in order not to become a source of distraction for the athletes.

DURING AN EVENT

- Provides athletes with encouragements, confidence building comments, and motivating feedback.
- Assists athletes in managing technical or tactical opportunities in competition (e.g. critical information about event, opponent behaviors or tactics, etc.)
- Assists athletes in managing mental abilities during competition.
- Adjusts tactics and strategies as necessary in response to how the competition unfolds or to significant tactical events.
- Behaves in a controlled manner and shows respect towards officials, opponents and own athletes.

AFTER AN EVENT

- Assesses strategy plan after the competition and identifies what aspects of the plan were successful and a rationale for what could be improve
- Debriefs performance with athletes, and provides constructive feedback that identifies what and how to develop greater performance.
- Implement recovery and regeneration strategies to maintain optimal performance for the next training session or competition.

Photo: Inga Bailey

7.5 HELP ATHLETES MENTALLY PREPARE

When entering a competition, it is very important to have a strategy in place, to take care of all extraneous factors, this way the coach and athlete can concentrate on the performance. There are factors that come into play before, during and after the event.

On the competition day the athlete must be properly warmed up physically and mentally, this process can include dynamic stretches, freeride runs, course inspections, warm up runs and visualization of the run. The coach should be paying attention to the timing of the event to ensure that the athletes are not spending too much time sitting around and getting cold. Monitor the state of your athletes to try ensure they are optimally primed when it comes time for them to perform.

You athletes will need positive reinforcement throughout the event to help them stay confident. Confidence and positive self-affirmation will help athletes in achieving their performance goals.

Before the event the athlete and coach should have an excellent understanding of:

- The tactics involved in competition
- Performance vs outcome goals
- Strategies to manage focus
- Strategies to manage negative anxiety
- Strategies to manage distractions
- Pre-competition meals and hydration

Additionally, coaches need some mental toughness during the competition to control their emotions and react adequately to unforeseen situations. During the event your athletes will tend to reflect your attitude and emotions, if you are stressed going into the event, chances are your athletes will be as well. Learn to control your emotions, remember the process and the goals of the event, stick to the strategy that you have set in place. Demonstrate respect to the officials, judges, and other coaches and athletes; your riders will emulate your behaviors.

Every athlete will behave differently when it comes to handling the pressures of the event. It takes time and an understanding of their behaviors and characteristics when placed in high-pressure situations to know how they will react. Designing mock competition strategies can help you determine how your athletes will behave, this process can take many competitions and you may have to try many different strategies. For additional information on Basic Mental Skills, see the NCCP multi-sport Basic Mental Skills Reference Material.

7.6 JUDGING – FREESTYLE EVENTS

7.6.1 FIS AND OLYMPIC JUDGING CRITERIA'S

At national and international events there are five (5) judges giving scores as well as one head judge who oversees the group. The head judge is a member of the jury. Judges give a score out of 10 and the athlete receives a total score out of 50. At provincial and regional level events, there may be fewer judges although each judge still generally is giving a score out of 10.

The judges are looking for the overall run and performance of the athlete as they decent the course. They are taking everything into consideration including; amplitude, difficulty, variety, execution, risk, combinations, progression and course or pipe use.

Amplitude: The height of the trick performed.
Difficulty: Difficulty of the trick as well as it's placement in the run and the combinations used.
Variety: Refers to a mix of straight airs and rotations on both walls (in pipe), rotations on different axis, as well as a variety of grabs and direction of spins used.
Execution and Lands: Refers to the stability, fluidity (and style), and control of the tricks performed.

Another consideration in judging that is especially pertinent in pipe riding is **risk.** An athlete will score higher with a difficult spin early in the run opposed to throwing the same trick at the bottom of the run (where falling carries little risk). Risk doesn't necessarily have to be a spin, a straight air with a lot of amplitude can be risky as well.

In halfpipe competitions using FIS Judging Criteria, there must be a minimum of one straight air and one rotation to maximize the score. If these are not performed, a full deduction will be taken from the score (2 pts per judge).

Falls, stops, and errors in execution will all lead to point deduction. Deductions are per judge (ie. A single hand touch at 0.4 leads to a 2.0 total deduction with five judges):

0.1– 0.4	Small mistakes such as flat landings, hand touch, snow brakes.
0.5 - 0.9	Hand drags and using hands for stability.
1.0 – 1.5	Hard tourchdowns and minor falls, body contact with snow
1.6 – 1.9	Complete falls without stop or interruption
2.0	Any complete Stop.

The Finish Line (Halfpipe)
The finish line indicates the final point of take off that will be considered by the judges. It is usually painted in Blue at the bottom of the halfpipe and should be clearly visible. If a rider takes off and performs and trick on or before the line, the trick will count. If they cross the line before take off, the trick will not be counted toward the run.

For more information on FIS judging criterias go to www.fis-ski.com

7.6.2 TTR JUDGING CRITERIA'S

One of the most unique qualities of the Swatch TTR World Snowboard Tour is the wide variety of competition formats that are used at the events around world. Judges for the TTR judge a wide array of freestyle formats including jams, best run, and best trick that showcase a rider's creativity and performance at any given TTR competition. The vast majority of events on the Swatch TTR World Tour employ the Overall Impression judging system (see definition below). The Overall Impression system showcases and encourages creativity and energy by looking at the rider's run in its totality and ultimately rewarding a rider's progressive riding skills. This system allows for greater consistency across the numerous and varied formats used at the different events.

With an incredible array of events that comprise the Swatch TTR World Snowboard Tour ranging from the Burton Global Open Series, The Oakley Arctic Challenge, The "Air & Style" events to the Honda Session, the judges are focused on rewarding the riders that bring the most imaginative and powerful riding to the forefront of competitive snowboarding. It is this relationship between the riders and the judges that fosters an open and progressive reward system that drives the competitive snowboarder to excel.

The judges will score the run by evaluating the run's "Overall Impression (OI)" which includes the execution of the run and the routine (variety of tricks) attempted. In OI judging the judges evaluates the specific tricks individually and as a sequence and looks at line, inherent style and overall flow of the rider on the course. What is desired is the highest level of progression...a run that is done with maximum technicality and one that has a new moves or sequences that pushes snowboard progression forward.

Focus then is as follows for the judges:

- The whole run appraised (tricks, flow, amplitude)
- First emphasis on progression
- Secondary emphasis on tricks and trick sequences
- Third emphasis on style and risk

Scoring Base:
(0-20: Poor) (20-40:Fair) (40-60:Average) (60-80: Good) (80-100:Excellent)
For more information go to www.ttrworldtour.com/about-ttr/judging.html

7.6.3 THE TC MEETING & FILING A PROTEST

The night before every event and often before "official" training days, the Organizing Committee (OC) schedules a Team Captain's meeting. Every coach coaching athletes entered in the competition needs to attend this meeting.

The coach has two professional responsibilities during the meeting:
- Arrive on Time
- Check the board

The time and location of the first team captains' meeting and of the draw will be shown in the competition program. The invitations for all other meetings (and parties) will be announced to the team captains at their first meeting. Representation by a substitute captain from another team during discussions at team captains' meetings is **not** allowed. Arrangements between team captains must be done before the TC meeting begins.

Team captains and supporting staff must make themselves aware of the competition rules before the event begins and the decisions of the Jury and must behave in a proper and sportsmanlike manner. The competition officials know the rules. A good coach knows the rules better than a good official.

Types of Protests:
- Against admittance of competitors or their competition equipment (must happen before the draw)
- Against the course or its condition (must happen no later than 60 minutes before the beginning of the competition)
- Against another competitor or against an official during the competition (must happen within 15 minutes after the last competitor has passed the finish (for Snowboard Cross before the next heat begins).
- Against disqualifications (must happen within 15 minutes after the posting of the disqualification)
- Against timekeeping or score calculations (must happen within 15 minutes after the posting of the unofficial result list)
- Against the decision of the Jury or Technical Delegate (must happen within 15 minutes after the posting of the disqualification)

A protest must be made to a member of the Jury. The Jury meets to deal with the protests and votes. Only the Jury members are to be present for the vote. The TD chairs the proceedings. The decision is to be made public immediately after the Jury meeting by posting the decision on the official notice board with the publication time stated. In Snowboard Cross the decision maybe announced orally.

CANADA
PARA SNOWBOARD

7.7 CLASSIFICATION - PARA-SNOWBOARD

What is Classification?
Paralympic sport exists so that athletes with physical, visual or intellectual impairments have equal opportunities to compete and be successful in sport. Classification groups athletes who have similar impairments together into classes for competition in their particular sport.

The purpose of the classification system is to minimize the impact of impairment on sport performance and to ensure the success of an athlete is determined by skill, fitness, power, endurance, tactical ability and mental focus -- the same factors that determine the success of able-bodied athletes.

Classification Plays Two Important Roles
1. To set eligibility criteria to determine what types and degrees of impairments are relevant to a sport; not only must a person have an impairment, it must also be significantly severe. The eligibility criteria will differ from sport to sport
2. To group athletes for competition in order to minimize the impact of impairment and to ensure that competitive success is to be determined by strategies, skills, and talent of athletes

Who Gets Classified?
An athlete must have an eligible and lasting impairment, which meets the specific minimal disability criteria of the sport. Each Paralympic sport has a different classification system, based on the sport's specific athletic skills and requirements.
An athlete must be classified for every sport in which they compete.

Classification Process
There are four steps an athlete will complete to be classified for a Paralympic sport.
1) Pre-assessment medical information
2) Consent
3) Athlete evaluation
   a. Physical assessment
   b. Technical assessment
4) Observation in competition

Recognized Classification
Currently, the International Paralympic Committee has three categories for athletes with a physical impairment that athletes can compete under for snowboarding internationally; upper limb and lower limb classes.

Sport Class SB LL1: Snowboarders in this sport class will have a significant impairment in one leg, for example a single above knee amputation, including through the knee, double above ankle amputation, absence of a functional knee joint (congenital deficiency) or a significant combined impairment in two legs, for example significant muscle weakness or spasticity in both legs.

** Athletes with amputations will use prosthesis during the races **

Sport Class SB LL2: Snowboarders in this sport class will have an impairment in one or two legs with less activity limitation. A typical example is a below knee amputation or mild spasticity.

** Athletes with amputations will use prosthesis during the races **

Sport Class SB UL: Snowboarders that have impairments of the upper limbs, which impacts on the ability to balance when racing down the slopes.

Beyond these physical impairment sport classes, and due to the limited data and research collected in the sport, there is currently no international classification system in place. The IPC has stated that it is dedicated to creating a classification and factoring system in the next couple years, which should be implemented before 2018.

For the sport classes listed below, IPC classifications currently do not exist and competition opportunities are currently limited to provincial and national level events. Organizers are encouraged to connect with the organizations listed below to assist in including participants within existing competition opportunities.

Visual Impairments: Canadian Association for Disabled Skiing and Snowboarding
Hearing Impairments: Canadian Association for Disabled Skiing and Snowboarding
Intellectual Impairments: Canadian Association for Disabled Skiing and Snowboarding

The development of a snowboarding program for persons with intellectual impairments will continue to be reviewed, but will focus on the opportunity for growth within a Special Olympics context.

http://disabledskiing.ca

Photo: Eric Escaravage

8. MANAGE A PROGRAM

8.1 INTRODUCTION

A successful snowboard program is well managed through thoughtful planning and communication between the provincial/territorial organization, the local club, the ski area, the parents, and the athletes involved.
With limited time, budgets and resources; the need for well-organized and efficient programs that are capable of feeding national level programs are more essential than ever before.

Coaches at the community and provincial level often have a strong grasp of snowboarding, but have little experience in areas such as business operations, strategic planning, management, marketing, public relations, risk management, liability, and facilities management. Although this section does not even begin to touch on all aspects of managing a program, it should serve to highlight the breadth of skills required to manage a program.

Outcome: Manage a Program (NB: This outcome is OPTIONAL for this context. If training this outcome, the evidence marked with a T must be trained. If evaluating, the evidence marked with an E must be trained and evaluated to meet the minimum standard for this outcome).

CRITERION: MANAGE ADMINISTRATIVE ASPECTS OF PROGRAM AND OVERSEE LOGISTICS		
EVIDENCE		Training(T) Evaluation(E)
A	Present a communication tool that outlines the philosophy and objectives of the program	TE
A	Provide a schedule of competition and training commitments	TE
A	Identify expectations for behaviour and commitment and identify appropriate consequences	TE
A	Facilitate logistics for away competitions (e.g., travel arrangements, food, chaperones, etc.)	optional
A	Work with program volunteers and administrators to prepare budgets and other financial logistics	optional
A	Ensure written criteria for talent identification and selection are available	optional
A	Ensure selection procedures and criteria are outlined and made available to athletes	optional
☐	Demonstrate ability to work with other coaches (assistants) using optimal leadership qualities	optional
A	Delegate activities appropriately to other coaches (assistants) and acknowledge their ideas and input into the program	optional

CRITERION: REPORT ON ATHLETE PROGRESS THROUGHOUT PROGRAM		
EVIDENCE		Training(T) Evaluation(E)
A	Present an assessment of relevant performance factors	TE
A	Identify appropriate level of progression and steps for improvement	TE
A	Ensure privacy of information and take steps to maximize confidentiality	TE
☐	Track and assess objective indicators of performance in relation to athlete or team goals (fitness testing results, attendance, training diary, training loads/volumes, etc.)	optional

Outcome: Manage a Program (NB: This outcome is OPTIONAL for this context. If training this outcome, the evidence marked with a T must be trained. If evaluating, the evidence marked with an E must be trained and evaluated to meet the minimum standard for this outcome).

☐	Present evidence of debriefing session or interview with athlete or parents to discuss progress in relation to individual goals	optional
☐	Use effective communication strategies and skills to promote program messages	optional
CRITERION: REPORT ON ATHLETE PROGRESS THROUGHOUT PROGRAM		
EVIDENCE		
A	Act to prevent and resolve conflict due to misinformation, miscommunication and misunderstanding	optional
☐	Empower and enable athletes to resolve conflicts	optional
☐	Resolve conflicts involving two or more individuals such that the conflict does not detract from athlete or team development and a positive interpersonal relationship with those involved is maintained	optional
☐	Establish strategies to address situations where athlete(s) do not meet expectations (performance, behaviour, or expectations)	optional

8.2 STARTING A SNOWBOARD PROGRAM (OR NEW ENTRY-LEVEL CLUB)

Talk to your local Provincial/Territorial Snowboard Association (P/TSA) Let them know you are interested in starting a program. Find out what programs are currently in your area. Complete registration forms with PTSA and Canada Snowboard (for a club).

Club Only; Get together a key group of volunteers that can assist you in managing club activities (registrar, treasurer, fundraising, etc.).

Plan your program:

- Who is the program targeting?
- Who are the coaches?
- How many are needed?
- Length of program?
- Ski Area? (Speak to your ski area to ensure you are not overlapping with current snow school programming, book training space, etc.)

Design yearly schedule and break down individual coaching sessions.

Sanctioning: Send a list of all activities (practice, competitions, fundraisers, etc.) to your local P/TSA who will take the information and submit it to Canada Snowboard to secure your insurance.

Recruitment: Advertise and recruitment athletes. Register all athletes.

Execute program: Evaluate the program and start planning to implement changes for the following season.

WORKING WITHIN A CLUB

Talk to your local PTSA to find your local snowboard club and met to discuss your strength/interests and where you can fit as a new coach within the club. Find a mentor coach with similar interests that you can work under when first starting out.

REGISTRATION

All snowboard athletes participating in any program must be registered with Canada Snowboard and their local club (if applicable). Registration is completed online on the Canada Snowboard website.

PROGRAM/CLUB FEES

Things to consider when setting club fees; Coaching costs (travel, time, prep time, etc), insurance/sanctioning, ski hill (lane rental, etc), travel costs required from athletes, length of program, value added (sport psych, nutrition sessions, etc), stage of athlete.

TRANSPORTATION

If you plan on transporting athletes in your personal vehicle, look into liability insurance with your personal insurance company. If you plan on purchasing a Team Van (8-15 passenger), proper plates and registrations are key. US DOT # for US travel is required.

8.3 MANAGE A PROGRAM: ADMINISTRATION

Coaching Licenses
Canada Snowboard Coaching Licenses expire annually on June 30.

The first step as a coach every year, is for you to get your Canada Snowboard/PTSA coaching license and ensure all of the coaches in your club, have it as well.

1. Eligibility: To renew your CSCP Coaching License, you must be considered at least Comp Intro "In Training" or have continued your coaching education through CSCP or NCCP since 2006, or actively coach in a current Canada Snowboard recognized club.

2. Provincial Membership: Next you need to purchase a Canada Snowboard / Provincial/ Territorial Snowboard Association (P/TSA) membership online.

3. Coach License: After or while purchasing your Canada Snowboard/PTSA membership, you can purchase your coaching license. For more information on the coach license options, please visit: https://www.canadasnowboard.ca/en/programs/coaching/currentcoach/license/

4. Criminal Records Check and Vulnerable Sector Search: These are required every 3 years. If yours is up for renewal, follow the link to check online and complete both the Records Check and Vulnerable Sector Search. A CSCP license will not be granted to an individual whose Criminal Record Check reports a conviction related to the Vulnerable Sector Search. A decision with respect to granting a CSCP license to an individual whose Check reports a conviction on any other offence shall be made by the Coaching Experts Committee.

Sanctioning Training, Events & Competitions
Sanctioning events provides the event organizer, club or coach - insurance. It is a formal process whereby an authorizing body (club, team, shop, school, sponsor, etc) provides its official approval for an activity to be held in that body's name and under its jurisdiction.

The sanctioning of an activity carries with it the obligation that the activity is carried out in accordance with the rules, policies, and procedures of the Provincial or National Snowboard Association (PTSA). PTSA sanctioned events do not need to have FIS points.

Sanctioning Activities
Activities will only be sanctioned by the PTSA if they advance the objectives of Canada Snowboard;
- Increase membership.
- Provide snowboard instruction & coaching.
- Raise funds.
- Provide competitive opportunities for CS members.
- Provide CS member athletes with opportunities to improve their FIS ranking.
- Provide instruction in CS approved technical programs (coaching, judging, or officials).

Sanctions can be requested at no cost by PTSA's & Clubs that have purchased CS memberships.

8.4 COMMUNICATION

8.4.1 COMMUNICATE THE PROGRAM PHILOSOPHY:

It is important to determine a clear philosophy to communicate your program's values and beliefs to the riders and parents and to provide a sense of direction for yourself and coaching staff. It is also the set of beliefs that the riders have with regards to the program. If you can answer the following question, you are on the right track for developing your coaching and program philosophy.

Who:

- Determine what level(s) of the LTAD you will be targeting in your program. You may also want to consider gender, i.e. All Girls Club.

What:

- Decide what disciplines you want to target. The terrain of the resorts may dictate this (i.e. you will not be able to run a halfpipe team at a hill that does not have a halfpipe!).

Where:

- Determine the region and resort you will be running you program in. You may want to consider using a couple different resorts within a region or focus on just one area.

When:

- Determine how many days a week you want to run your program and how many weeks per season. Refer to the LTAD for guidelines for each stage of athlete.

Why:

- Ask yourself what your goals are for your program, such as helping riders learn life skills and become better citizens.

How:

- It is important to determine realistic objectives for your program including budget, staff, facilities, time, etc.

It doesn't matter how good your philosophy is if nobody ever gets to see it. To be successful, programs need to be able to relay this information to their athletes, parents, stakeholders, assistant coaches and anyone else that may be involved with your team. Consider creating a team website, or athlete/parent handbook that outlines your team philosophy and other critical information for athletes. Think about where and how most of your athletes communicate and tap into their existing communication networks (text, Facebook, email, web) and also consider how parents generally consume information. To communicate with all stakeholders, don't reinvent the wheel, keep it simple and make it easy for them to find the information.

Photo: Tyler Lilico

8.4.2 COMMUNICATE THE TRAINING AND COMPETITION SCHEDULE

This seems like a no brainer, but it is necessary to communicate with parents and athletes when and where to show up. There is a plethora of communication tools available for the tech savvy coach that allows people to be instantly updated/invited to training and competitions. Like most sport programs, money and time are the two biggest hurdles, so consider these when planning your communication strategies.

8.4.3 COMMUNICATE BEHAVIOUR EXPECTATIONS & CONSEQUENCES:

It is key to establish and communicate clear expectations for your program and athlete behavior. Athletes need to be held accountable for their actions, positive or negative. It is also important to identify the consequences for their actions. A club Code of Conduct is an excellent way to communicate these expectations.

Similarly, assistant coaches, parents, chaperones and other support staff also need to know and have an established code of conduct (especially when travelling). Setting out expectations clearly and ahead of time ensures that there are no surprises down the road.

Refer back to the Making an Ethical Decision material to determine when and where you are going to enforce the rules and don't be afraid to enforce your rules when necessary. Your reputation as a coach and that of the club/team is at stake when you permit behaviour to occur without consequence. Snowboarding with your team should be considered a privilege, not a right.

8.4.4 COMMUNICATE TRAVEL LOGISTICS

This can be one of the largest administrative responsibilities of a coach that travels with athletes. If you have never prepared a travel budget and logistics, it is worth chatting with other coaches and teams to see how they handle it. Depending on the size of your team and the resources available to you, you may be able to delegate this responsibility. When communicating the travel plans, use the tools that you are most comfortable with (word, excel, email, etc) and will be most easily understood by the parents and athletes.

It is very easy for the trip to get very expensive, very quickly so when planning travel consider how important the event is in the development of the athletes' career and opportunities to keep the costs down. Consider areas to save money (cooking meals instead of eating out) and areas that it is important to spend a little extra (rental coverage, bed for each athlete). Look for deals, but keep an exit strategy in mind. If there is no snow, or the event gets cancelled, what repercussions do you have to get money back? A detailed and well thought out trip payment and cancellation policy is essential to help with trip planning. Common practice is to add a 10% administration fee to trips to cover overages, and planning time.

For most Canadians, spending thousands of dollars every year to train and compete is not possible. Try to match the annual financial requirements to the level of athlete, and help the parents realize and plan for a bigger budget the following season as the athlete continues to develop and will require more resources/support.

There are at least two distinct ways to plan trips logistics. The first is to create a trip package for the athletes and set a price. With this method, everyone is on the same program and pays the same cost. The challenge is in forecasting the price and ensuring that you break even or make money on the trip. This is perhaps the best method for a large group.

The second method is a cost recovery system where athletes are charged for their share of the trip. This works well if athletes are not all on the same program (arriving and departing on different dates, covering their own accommodation or travel etc.). Although the trip may become more economical to the athletes, the time and energy for the administration of the details can become overwhelming.

In either case, be transparent and consistent with the planning and continuously improve the systems that you create. Just like your athletes, practice makes perfect.

8.4.5 COMMUNICATE TALENT IDENTIFICATION, SELECTION CRITERIA AND PROCEDURES

Talent Identification is the process of screening using selected tests to identify the potential for success. Previous involvement is NOT a prerequisite.
Selection is the screening of athletes currently participating in a sport using experienced coaches and/or selected tests to identify those most likely to succeed.
Targeted Recruitment is the recruitment of talented athletes from locations where infrastructure already in place.

How much of an athletes performance potential can be measured for snowboarding?

Generic Measurements:
- Performance
- Anthropomorphic
- Psycho-Social
- Genetic

What can be measured?
- Physical
- Physiological
- Psychological
- Perceptual
- Technique/Skill
- Sociological
- Maturation

Talent identification and selection is closely linked to the stages of the LTAD and the level of program that the athlete is involved with. The LTAD is a good starting point for creating your selection criteria. The coach of a stage 4 athletes, should be looking at what the top stage 3 performers are doing or capable of since that is who they will recruit for their program. Additionally, the coach should understand what defines a stage 5 athlete since that is the next step for the stage 4 rider.

Canada Snowboard has also done extensive research on an Athlete Development Matrix and Podium Pathway to clearly describe what is needed at each LTAD stage for a snowboard athlete to have career long success. More information is available on our website.

Adapted from Lyons, K., The Talent Identification Process (2008), http://www.slideshare.net/Postillion/the-talent-identification-process, retrieved Aug 30, 2011.

"A specific and well-planned training, competition and recovery regime will ensure optimum development throughout an athlete's career. Ultimately success comes from training and performing well over the long-term rather than winning in the short- term. There is no short cut to success in athletic preparation." Balyi (2001)

8.5 REPORT ON ATHLETE PROGRESS

It is important that a coach can articulate to an athlete what they have been doing well and areas for improvement. Assessments should be similar to the talent identification and selection criteria and procedures outlined previously.

Parents and athletes in stage 3 programs should be given a mid-season and end of season assessment which outlines the skills learned that season and shows where they can progress next season.

Formal assessments for the Stage 4 athlete should happen at least twice a year, once during the preparation phase, and once after the competitive phase. Informal assessments, and check-ins should be happening on a regular basis, and the information and goals recorded. The information collected in these assessments should form some of the basis for designing the season training plans and the individual sessions. Use the LTAD or the Athlete Audit (from Design a Snowboard Program) to establish an athlete's "competence" for each key performance factor. Not only are formal and semi-informal assessments essential for athlete motivation and development, it is critical to helping an athlete see their own progression to the next level of training/competing.

Assessments can either be a source of stress or excitement for the athlete, and numbers are not always the most flattering. When delivering results, it is import to be honest, and report trends in the data. For example, a female athlete may not like hearing that her body fat has increased by 5%, but if her overall strength is improving and her nutritional requirements are being met more consistently, then her athletic performance may be improving. Of course, you will need to make a judgment call about what you are testing and how to relay the information to the athlete.

Keep in mind the confidentiality of the information you collect during the assessments and share only with those that you have permission to do so and require the information.

Involving parents in the debrief can be beneficial to show the value and create more buy-in to your program. Parents are a key part of the athlete's support network and can help keep the athletes motivated when you are not around.

8.6 MANAGE A PROGRAM CHECKLIST

The checklist below has been prepared to help you structure your club model.

8.6.1 ADMINISTRATION

- ☐ Obtain sanctioning with Canada Snowboard and PTSA
- ☐ Draw up contracts for services (coaches, athletes, physio, psych, video, photo, resorts)
- ☐ Ensure privacy of information and take steps to maximize confidentiality
- ☐ Develop sport policies (travel policy, camps, and selection protocols)
- ☐ Working with a sport budget
- ☐ Identifying and managing competition-day logistics
- ☐ Registration forms (include: heath questionnaire & concussion management)
- ☐ Facility logistic (trampoline, dryland, parks and pipes, lanes, tracks)

8.6.2 HUMAN RESOURCES

- ☐ Supervising coaching and support staff
- ☐ Hiring and managing experts, for example, those in program development or athlete performance
- ☐ Recruiting coaches and support staff
- ☐ Identifying talent
- ☐ Recruiting athletes
- ☐ Recruiting volunteers
- ☐ Developing fair selection procedures
- ☐ Scouting the opposition
- ☐ Providing or programming professional development opportunities
- ☐ Supporting the academic goals of those in school or at college/university
- ☐ Tutors
- ☐ Study hall
- ☐ Advisors
- ☐ Course selection

8.6.3 COMMUNICATION

- ☐ Communicating with a board of directors
- ☐ Communicating with parents and guardians
- ☐ Preparing memos for parents and guardians
- ☐ Working with officials
- ☐ Working with the media
- ☐ Managing and resolving conflicts
- ☐ Making interventions and decisions
- ☐ Promoting drug-free sport

- ☐ Reporting on athlete progress
- ☐ Establishing and managing corporate partnerships:
  - Preparing documents to sell your sport
  - Making the pitch
  - Sealing the deal
  - Handling promotional logistics
  - Maintaining the relationship
- ☐ Supporting charity work

8.6.4 TECHNOLOGY

- ☐ Entering data in databases
- ☐ Accessing data in databases
- ☐ Managing electronic files
- ☐ Using video analysis for error detection and correction
- ☐ Establishing processes for sending and receiving emails
- ☐ Registering participants in programs
- ☐ Managing your sport's website

8.6.5 TRAVELLING

- ☐ Booking travel for competition
- ☐ Implementing travel policies
- ☐ Shipping and transporting equipment (domestic and international)
- ☐ Working with a customs broker
- ☐ Booking accommodation (domestic and international)
- ☐ Facilitate logistics (e.g., travel arrangements, food, chaperones, etc.)
- ☐ Managing a travel budget
- ☐ Developing a checklist for travel to competition
- ☐ Advising parents and guardians on travel requirements

8.6.6 PLANNING SPECIAL EVENTS

- ☐ Raising funds
- ☐ Developing a budget
- ☐ Advertising
- ☐ Obtaining the services of officials
- ☐ Hosting participants at sporting events
- ☐ Designing competitions (draws, round-robins, etc.)
- ☐ Conducting community outreach:
  - o Organizing camps
  - o Organizing children's/age-appropriate leagues
  - o Delivering clinics

8.6.7 PREVENTING SPORT-RELATED INJURIES

What to do and when to do it
Before the season
Have each athlete complete a medical profile ☐ Inform parents of possible risks ☐ Ensure facilities and equipment meet established safety requirements ☐ Create and fill in a facility safety checklist ☐ Review last season's injuries or common injuries in your sport
During the season
<u>Before a practice or competition</u> ☐ Inspect equipment and facilities ☐ Meet with the officials ☐ Prepare an Emergency Action Plan ☐ Plan specific safety measures for the practice/competition <u>During a practice or competition</u> ☐ Inform athletes of specific safety measures relating to activities, facilities and equipment ☐ Ensure there is proper supervision ☐ Evaluate athletes ☐ Ensure that fair play principles are followed <u>After a practice or competition</u> ☐ Store equipment safely ☐ Fill in an accident report if necessary
After the season
☐ Keep an accident/injury report log

8.7 FIS LICENSES

A FIS License is an athlete license required by those wanting to compete at FIS sanctioned events. The international FIS calendar is found at www.fis-ski.com

To obtain a FIS license an athlete must meet minimum requirements:
- Be of age:
  - ALPINE/SBX - 15 years or older on January 1.
  - FREESTYLE - 13 years or older on January 1.
- Be a member of a Provincial Territorial Snowboard Association.
- Complete and submit the FIS Athlete's Declaration.
- Submit the appropriate license fee
- Purchase Sport Accident Insurance Policy (SAIP)

Important to remember:
- FIS licenses are not activated immediately since it takes time to process.
- All FIS License applications must be submitted to provincial snowboard associations.
- FIS Licenses expire on June 30 of each year, and must be renewed annually
- Payment for FIS Licenses must be submitted at the time of application.

8.8 SPORT ACCIDENT INSURANCE PROGRAM (SAIP)

SAIP provides coverage, in excess of provincial health plans or other private insurance, against risks specific to sport training and competition and applicants must have provincial health care to be eligible for SAIP. There are three levels of SAIP coverage:

Class 1:
- Recommended for all High Performance Program coaches and athletes.
- Mandatory for National Team Athletes (not Development or NextGen)
- Available to all members
- Includes Out of Country coverage for up to 60 consecutive days.

Class 2B:
- Available to all members.
- Minimum requirement for FIS members competing out of Canada.
- Includes Out of Country coverage for up to 25 consecutive days.

Class 2A:
- Available to all members.
- Minimum requirement for FIS members
- Out of Country coverage not available

SAIP IS upgradable at any time as long as it's done before the trip. Meaning if they have 2A and are planning to go compete out of country, it needs to be upgraded before they leave Canada, not halfway through the trip. T**he policy period is July 1 through June 30 annually.**

Policies are available to all current P/TSA members. You may purchase SAIP from the CS website under Member Services, once your P/TSA memberships have been processed.

Note: It usually takes a MINIMUM of TWO WEEKS to process a FIS License and SAIP application. Make sure that you leave enough time prior to the competition for your application to be processed!

APPENDIXES

1. SESSION PLAN
2. COMMUNICATION PLAN
3. SAMPLE YEARLY TRAINING PLANS
4. GOAL SETTING
5. GUIDELINES FOR THE TRAINING OF ATHLETIC ABILITIES AND ATHLETES' AGE
6. GENERAL PROCESS FOR DESIGNING A SPORT PROGRAM: KEY STEPS
7. FACILITY INSPECTION
8. EQUIPMENT

APPENDIX 1: SESSION PLAN

DATE: _____
CONDITIONS: (WEATHER, SNOW, ETC) _____
ATHLETE LEVEL: (LTAD STAGE) _____
WHAT: (YOU WANT TO TRAIN) _____
WHEN: (HOW LONG IS SESSION) _____
WHERE: (ARE WE RIDING TODAY) _____

GOAL OF SESSION:

TIME: _____ GENERAL WARM-UP: _____

TIME: _____ SPECIFIC WARM-UP: _____

TIME: _____ KEY TEACHING POINTS: _____

_____

_____

_____

TIME: _____ COOL DOWN: _____

CONCLUSION:

_____

_____

_____

APPENDIX 2: COMMUNICATION PLAN

Good communication from coaches to parents and athletes will be the key to the success in any snowboard program.

Athletes and Parents need to know what is going on before they will support what you're doing. Create an actual communications plan for your program outlining who initiates communication in a program, main contacts, forms of communication, etc. or create a simple mock 'welcome to the program' letter that outlines;

- Parents main point of contact
- Details of programming.

APPENDIX 3: SAMPLE YEARLY TRAINING PLANS

Sample Yearly Training Plans (YTPs) are available for LTAD Stages 3-6 at http://www.canadasnowboard.ca/en/about/snowboarding/ltad/

Athlete Development Pathway

Development Stages	Stage 1 Active start AS	Stage 2 Fundamentals FUN	Stage 3 Learn to ride L2R	Stage 4 Train to train T2T	Stage 5 Train to Compete T2C	Stage 6 Learn to Win L2W	Stage 7 Train to Win T2W
Chronological ages: Alpine	Boys 0-5 Girls 0-5	Boys 6-9 Girls 6-8	Boys 9-12 + Girls 8-10	Boys + / - 12-16 Girls + / - 11-15	16 +	19 +	24 +
Chronological ages: snowboard cross					16 +	18 +	22 +
Chronological ages: Freestyle and Half-Pipe					14 +	17 +	20 +
New NCCP/ CSCP	SNOW SCHOOL	SNOW SCHOOL	BASIC coach (L 1) Comp INTRO (L2) CASI Instruction	Comp INTRO (L2)	Comp-DEV (L3)	Comp-DEV (L3)	Comp-HP (L4)
Periodization	none	Simple	Simple	Simple	Simple or Double	Double	Multiple
Training vs comp. vs recovery ratio	none	90 / 10	85 / 15	75 / 25	70 / 30	70 / 30	60 / 40
Local and regional comps		clubs					
Provincial comps							
National Comps							
International Comps / World Cup / Junior Championships				Juniors			
World Championships / Olympics							
Global training orientation	Basic movement skills ABC's	Basic snow sliding sports + consolidation of ABC's	All Basic Snowboard skills	Develop training habits.	Consolidate training habits	Competition = part of yearly planned training	Competition = part of yearly planned training
Specific training orientation	Fun and pleasure	Fun and pleasure	Experience races in multiple snowboard disciplines	Begin competition in team environment	Advanced mental skills	International competitions, specific to one or multiple disciplines	High performance, specific year round physical training
ENERGY SYSTEMS							
Aerobic Endurance			D	D	P / C	P / C	M
Aerobic Power				D	P / C	P / C	M
Anaerobic Endurance and Power				D	D	P / C	M
Speed		D	D	D	P / C	P / C	M
Approximate volume (H / year)	0	20	35	50	20	20	20
MUSCULAR DEVELOPPEMENT							
Strenght-Endurance		D	D	D	P / C	P / C	M
Hyperthrophy				D	D	D	M
Maximal strenght			D	D	D	D	M
Power-speed / Power-speed endurance			D	D	D	P / C	M
Flexibility		D	D	P / C	P / C	P / C	M
Approximate volume (H / year)	0	10	50	75	125	175	150
MOTOR SKILLS							
Reaction speed	D	D	D	D	P / C	P / C	P / C
Agility	D	D	D	D	P / C	P / C	P / C
Mobility	D	D	D	D	P / C	P / C	P / C
Coordination	D	D	D	D	P / C	P / C	P / C
Spatial orientation	D	D	D	D	P / C	P / C	P / C
Rythm	D	D	D	D	P / C	P / C	P / C
Motor balance	D	D	D	D	P / C	P / C	P / C
Approximate volume (H / year)	60	75	100	75	10	10	10
SNOWBOARD SKILLS							
Fundamental, basic skills (La glisse)	L	L	D	D	P / C	P / C	P / C
Fundamental, advanced skills		L	L	D	D	P / C	P / C
Discipline specific skills (Pipe, GS, SBX)		L	D	D	D	C	C
Tactical skills		L	L	D	D	C	C
Approximate volume (H / year)	0	40	120	200	280	400	500
OTHER SPORTS SKILLS							
Multi-sport skills / other sports (Personal choice)	40	75	75	75	50	50	50
Approximate volume (H / year)	40	75	100	100	50	40	30
Sports psychology							
Team spirit		L	D	D	P / C	P / C	P / C
Emotions : Activation / Relaxation / Motivation			L	L/D	D	P / C	P / C
Concentration: Vizualization / Focus			L	L/D	D	P / C	P / C
Goal setting: S.M.A.R.T. E.R.			L	L/D	D	P / C	P / C
I.P.S.: pre-competition and competition plan			L	L/D	D	D	D
Critical reflexion			L	L/D	D	D	D
Approximate volume (H / year)	0	15	25	35	50	70	100
Total Training Volume (H /Year)	100	235	430	535	535	715	810
Competition volume	0	15	35	45	60	80	120
Total Volume (H / Year)	100	250	465	580	595	795	930

Legend		
	Learn	L
	Develop	D
	Consolidate	C
	Perfect	P
High importance	Integrate	I
Considerable importance	Maintain	M
Moderate importance	Recuperate	R

APPENDIX 4: GOAL SETTING

COACHES GUIDE: Key Points to Emphasize when Introducing Goal Setting to Your Athletes

- Ask your players to define GOALS. Have them discuss why they set goals. Then, discuss additional ways that goals can help performance.
- Teach your players the importance of Systematic Goal Setting (using different lengths and types of goals) and give examples of elite athletes to stress your point.
- Discuss, in detail, the tips of effective goal setting as outlined above.
- Have the players complete some of the goal setting exercises, included at the end of the chapter.
- Brainstorm ways for the team to "stay on top of" the goal setting plan.

Every day, for three years and ten months, I wrote at the top of my training log, ''I work harder than anyone else, that is why I will be an Olympic Medalist!'' I also wrote down specific goals for every competition and every day and week of training. These goals were very specific and focused on MY performance, not my competitors.

Having these goals was the only way I was able to get through all my injuries (operations and bone breaks), and stay focused enough at the Olympics to win a medal. There were so many days when I just wanted to sleep in, but having my training goals made me head into rehab or weight training instead. At the Olympics, simple goals kept me intense and focused. Goal setting seems like more work, but if I didn't do it, I wouldn't have a medal around my neck today."
Olympic medal winner in Atlanta.

Goal Setting Exercises

To help your players understand and use goals more often in practice and competition several goal setting worksheets and recording sheets have been included. Feel free to pick and choose which ones work best for you. The sheets have been included to get athletes started on effective goal setting; feel free to modify the forms by incorporating your own ideas into your goal setting program.

Exercises 1 and 2 are targeted toward older players; they are designed to bring home differences between short and long term goals and outcome and task goals.

Exercise 3 is an example of a goal setting sheet for events and can be used with any age group. Pick four events within each season in which you want to emphasize goal setting. Write the name of the event in the first blank given. Choose a goal for each event, remembering to keep them challenging but realistic.

Keep the sheet in a safe place and remember to review it before you compete in the next upcoming event.

Exercise 4, 5 and 6 are targeted towards younger athletes. The main purpose of these exercises is to get the younger athletes thinking about short and long-term goals and emphasize how one type of goal influences the other.

Exercise 7 can also be used with any age group. Setting and recording daily goals is important. Daily goals can be recorded in many different ways. One way of recording daily goals is on a 3x5 card.

Finally, at the end of this chapter, some training log templates have been included and will be described in more detail there.

GOAL SETTING EXERCISE 1:
HOW FAR SHOULD I LOOK AHEAD?

Long-term goals tell you where you want to go and short-term goals tell you how you are going to get there. Both are important for effective goal setting. Try this exercise to help you breakdown your long-term goals.

1. What is one of your long-term goals for this season?

2. What are the abilities or skills you need to achieve this goal?
a.
b.
c.

3. What can you do between now and the end of the season to develop those abilities and skills?
a.
b.
c.

4. What will you do this week to develop those abilities and skills?
a.
b.
c.

5. What can you do next practice to develop those abilities and skills?
a.
b.
c.

GOAL SETTING EXERCISE 2:
MOVING BEYOND OUTCOME GOALS TO TASK GOAL SETTING

Outcome goals tell you where you want to be which can help motivate. But, on a daily basis, they do not tell you what you need to DO.

1. Start with an Outcome
Choose an upcoming event, and pick a challenging but not impossible outcome goal (win, place, get a certain score, etc.). Write that goal down in detail here:

2. Moving From Outcome to Task Goals
How can you maximize your chances to achieve this goal? Write down three things (i.e. movement, spin, placement, speed, concentration, and good breakfast, plenty of sleep) you can do at the event in order to increase your odds of achieving the outcome goal.

1. I will: _____

2. I will: _____

3. I will: _____

[You have just gone from goal setting to task goal setting.]

3. Practicing the Task Goals in Training
What can you do in practice between now and your competition to increase your chances of achieving your three competition tasks? Write down two things to focus on in practice that will gear you towards your competition task goals. For example, if your competition task goal is to stay compact in the air over jumps, you might focus on specific movement drills in practice.

1. In training, I will _____

2. In training, I will _____

GOAL SETTING EXERCISE 3: SETTING GOALS FOR EVENTS

Name:
Event Name:
GOAL:

Discipline:
Event Date:

Skills needed to achieve this goal:

What I am going to work on in practice to help me achieve this goal:

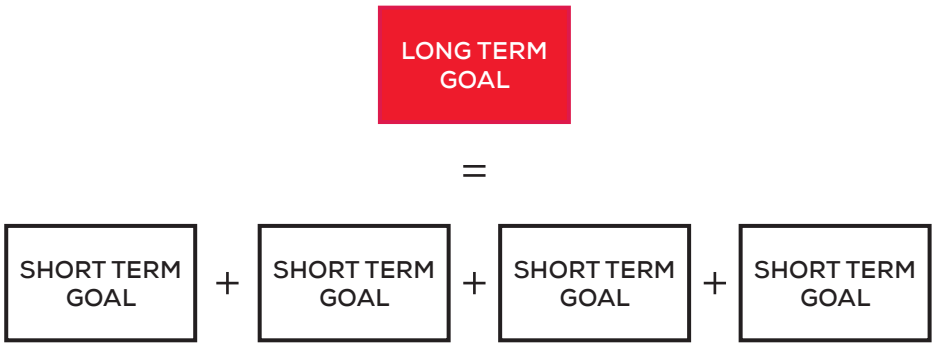
Skills needed to achieve this goal:

GOAL SETTING EXERCISE 4: STEPPING STONE EXERCISE

Write your long-term goal in an oval on top of a sheet of paper. Make arrows that all point towards the goal. Use the arrows as stepping-stones and write down your short-term goals that will lead to your long-term goal.

Adapted from Mental Skills for Young Athletes by John M. Hogg (1997)

e.g. To be on time to practice each day



GOAL SETTING EXERCISE 5:
MAKE DREAMS REALITY

In the box provided write down your dreams as a competitive Snowboarder. Then underneath write down four things you can do today in training to bring you a little closer to your dreams.

My Dream List:

Four Things I can do Today to Help Me Reach My DREAMS:
1.
2.
3.
4.

EXERCISE 6: SHOOT FOR THE STARS!
DREAM GOALS (MORE THAN 4 YEARS AWAY)

1.
2.

Long Term Goals (1 – 4 years away)
1.
2.
3.

Short Term Goals (A couple weeks to months away)
1.
2.
3.

Daily Goals
1.
2.
3.

Use the goal setting rocket to help define your dream goal(s), long term, short term and daily goals.

GOAL SETTING EXERCISE 7:
DAILY GOAL SETTING CARDS/SHEET

My goal for today:

What do I need to do physically to accomplish my goal?
1.
2.

What do I need to do mentally to accomplish my goal?
1.
2.

KEEPING TRACK OF PROGRESS TRAINING LOGS

An important aspect of setting goals is writing them down and making them real. One way to help keep track of goals is by maintaining a training log. This written log of daily activities serves as a way to help maintain a more systematic focus on all aspects of training and competition. Training logs can include information about both physical and mental practice and goals. Benefits from keeping a training log, include developing a better sense of how you spend your practice time, knowing where improvements are coming from, increasing your motivation to keep working, and heightening your awareness at competitions.

On the next pages you will find some sample training logbook pages. Note that logging will take place both before and after each practice and before and after events. Feel free to make copies of any of these sheets and try them out with your team.

DAILY TRAINING GOALS LOGBOOK

BEFORE TRAINING

Physical Training Goals:

1. _____

2. _____

3. _____

Mental Training Goals:

1. _____

2. _____

3. _____

AFTER PRACTICE EVALUATION:

Physical Training Goals – Accomplishments:

Physical Training Goals –- Things to keep working on:

Mental Training Goals -- Accomplishments: Goal Setting

Mental Training Goals – Things to keep working on:

WEEKLY TRAINING GOALS LOGBOOK

Date _____

THIS WEEK'S GOALS:
1.
2.
3.
4.
5.

Strategies for attaining goals:
1.
2.
3.
4.
5.

Obstacles that might prevent me from achieving goals:
1.
2.
3.
4.
5.

Self-evaluation:

DAILY TRAINING LOGBOOK

Date _____ AM or PM

Type of Workout: Freeriding/Gates/Weights/Cardio/Flexibility

Physical Training goals:

Mental Training goals:

Workout:

Comments: Goal Setting

COMPETITION LOGBOOK

Date_____

Event:

How did you feel?

Coaches' Comments:

WEEKLY TRAINING GOALS LOGBOOK

Date _____

THIS WEEK'S GOALS:
1.
2.
3.
4.
5.

Strategies for attaining goals:
1.
2.
3.
4.
5.

Obstacles that might prevent me from achieving goals:
1.
2.
3.
4.
5.

Self-evaluation:

DAILY TRAINING LOGBOOK

Date _____ AM or PM

Type of Workout: Freeriding/Gates/Weights/Cardio/Flexibility

Physical Training goals:

Mental Training goals:

Workout:

Comments: Goal Setting

COMPETITION LOGBOOK

Date_____

Event:

How did you feel?

Coaches' Comments:

APPENDIX 5: GUIDELINES FOR THE TRAINING OF ATHLETIC ABILITIES AND ATHLETES' AGE

		6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Aerobic Power (intense, short efforts of 2-10 min)	F	☹	☹	☹	☹	☹				☺	☺	☺	☺			
	M	☹	☹	☹	☹	☹	☹				☺	☺	☺			
Aerobic Endurance (long efforts)	F	☹	☹	☹	☹		☺	☺	☺	☺						
	M	☹	☹	☹	☹	☹		☺	☺	☺	☺					
Speed-Endurance	F	☹	☹	☹	☹	☹			☺	☺	☺					
	M	☹	☹	☹	☹	☹	☹			☺	☺	☺				
Strength-Endurance	F	☹	☹	☹			☺	☺	☺	☺	☺	☺				
	M	☹	☹	☹			☺	☺	☺	☺	☺	☺	☺			
Maximum Strength	F	☹	☹	☹	☹	☹	☹	☹			☺	☺	☺			
	M	☹	☹	☹	☹	☹	☹	☹	☹	☹		☺	☺	☺	☺	
Speed-Strength (muscular power)	F	☹	☹	☹	☹	☹	☹	☹	☹			☺	☺	☺		
	M	☹	☹	☹	☹	☹	☹	☹	☹				☺	☺	☺	
Flexibility	F	☺	☺	☺	☺	☺										
	M	☺	☺	☺	☺	☺										
Speed (efforts of 8 seconds or less)	F	☺	☺	☺			☺	☺	☺	☺						
	M		☺	☺	☺				☺	☺	☺	☺				
Speed (fast cadence of movement, short efforts)	F	☺	☺	☺												
	M	☺	☺	☺												
Agility/Balance/ Coordination	F	☺	☺	☺	☺	☺										
	M	☺	☺	☺	☺	☺										
Basic Techniques	F			☺	☺	☺	☺	☺								
	M				☺	☺	☺	☺	☺							
More Advanced Techniques	M F							F	FM	☺	☺	☺	☺			
Tactics and Decision-making	F	☹	☹	☹					☺							
	M	☹	☹	☹					☺							

Legend: ☹ Should be avoided ☺ Optimal training age ☐ Not a priority
▢ In moderation ■ As needed by the sport
F Female M Male

APPENDIX 6: GENERAL PROCESS FOR DESIGNING A SPORT PROGRAM: KEY STEPS

Determine the coaching context in which your program will be implemented. To do so, take into account variables such as your sport, the age of your athletes, their training and competition background, and previous performances they have achieved.

Taking into consideration notions of growth and development, determine the major orientation that your program should have (FUNdamentals, Training to Train, Training to Compete, Training to Win).

Using your sport's athlete development model, identify specific aspects that must be featured within your program from a technical, tactical, physical, and mental point of view. (Note: You can obtain this information by contacting your National Sport Organization.)

Using your sport's athlete development model, make a general assessment of your athletes' strengths and weaknesses, given their age.

Establish the Structure of Your Program

Make an inventory of the competitions in which you would like your athletes to compete throughout the season, and determine their relative importance (regular, important, exhibition, tournaments, playoffs, championship, etc.).

Make an inventory of the training opportunities available to you and to your athletes (number of practices or training sessions per week, duration of each session, facilities and equipment available).

Determine when the first official competition will take place. Enter this date on your program planning form; it will represent the beginning of the Competition Period of your program.

Determine when the last official competition will take place. Enter this date on your program planning form; it will represent the end of the Competition Period and the beginning of the Transition Period of your program.

Determine when the first formal training contact with your athletes will take place. Enter this date on your program planning form; it will represent the beginning of the Preparation Period and the end of the Transition Period of your program.

Identify the various events that will be featured in your program (training camps, regular competitions, important competitions, tournaments, championships, selections or trials, fundraising activities, social events, etc.), and specify their relative importance. Indicate the date of these events on your program planning form.

Determining the Training Priorities, Objectives, and Methods of a Given Week of Your Program

From the series of sample sport programs provided, choose the one that suits your particular family of sports; alternatively, use a similar template already produced by your sport.

Choose a week of the program.

Using the code based on lines of varying thicknesses, identify the most important athletic abilities (maximum of 5) to train in this particular week.

Using the colour code, identify the training objectives associated with each of the athletic abilities you have selected.

Ask your athletes to validate these objectives to ensure they match their skills, interests, and motivations; for instance, ask them to complete questionnaires such as the ones proposed in the Reference Document of the Introductory module.

For each combination of athletic ability – objective, identify appropriate types of exercises that could be used during practices (for all athletic abilities) and practice conditions (for sport-specific technical and tactical elements only).

For each athletic ability you have identified, and bearing in mind the desired objective, determine the number of training sessions needed per week and the amount of time that must be planned for training during each practice. Note: You may choose to spend more time than the "minimum recommended time for training a particular athletic ability; however, you should not devote less time than recommended if you really want to achieve the desired training effect.

Add up all the training time required. This represents the amount of time you should devote to training in the week you have chosen.

To determine if the total time obtained in Step 18 is realistic for your training situation, add up the number of practice sessions that you can have during the week and the length of the main part of each session. This figure represents the actual training time available to train the various athletic abilities in the week you have chosen.

Determine the gap between the time required in the ideal situation (Step 18) and the actual time available for training in the week you have chosen (Step 19).

If the gap in time is significant, consider the following questions when you come to decide which athletic abilities to prioritize:

- Can the athletes train certain athletic abilities individually, outside your practice sessions, or before or after the sessions?
- Is it possible to combine the training of certain athletic abilities in your sessions?
- Which athletic abilities are the most important according to the sample program of your family of sports?

Bearing in mind the training time available (Step 19) and the reflection you did in Steps 20 and 21, lay out the training priorities and content in the different practice sessions of the week. Use the Planning a Practice Session Worksheet and, for each session, specify the following information:

- The athletic abilities to be worked on
- The training objectives
- The practice conditions and types of activities that are appropriate
- The training methods and the time devoted to training each athletic ability

Once you have this information, you should be able to put together the main part of each of your practice sessions using the process presented in the module Planning a Practice

APPENDIX 7: FACILITY INSPECTION

FACILITY: _____

DATE: _____

INSPECTED BY: _____

FACILITY MANAGER NAME: SIGNATURE:

NAME OF COACH: SIGNATURE:

DATE:

NOTE: THIS DOCUMENT, ONCE COMPLETED, SHOULD BE GIVEN TO THE FACILITIES MANAGER AND THE COACH SHOULD KEEP A COPY FOR HIS/HER FILES.

APPENDIX 8: EQUIIPMENT

Stance: Adopt a position on the board that promotes stability, yet allows for mobility and/or agility.

Stage 4 athletes should adapt and modify their stance to suit:

- Individual physical make-up (riders with disabilities or limitations)
- Discipline/Environment (Style, Cross, Alpine)
- Equipment

Alpine

Choosing the correct board
How is this done?

- Athlete size and weight
- Ability level
- Discipline (PGS, PSL)

Choosing the correct bindings

- Adjustability
- Stiffness (or lack there of)
- Forward Lean
- High Backs

Choosing Plates and Cants

- Which plates to go with?

Choosing the correct boots

- Size matters (sole length on alpine set-up)

Recommended set-up

- Width
- Angles
- Canting
- Plates

SBX

Choosing the correct board
How is this done?

- Athlete size and weight
- Ability level
- Shape

Choosing the correct bindings

- Adjustability
- Stiffness (or lack there of)
- Forward Lean
- High Backs
- Size

Choosing Plates and Cants
- Which plates to go wit

Choosing the correct boots
- Size matters (sole length on alpine set-up)

Recommended set-up
- Width
- Angles
- Plates

Style

Choosing the correct board
How is this done?
- Athlete size and weight
- Discipline
- Ability level
- Shape

Choosing the correct bindings
- Adjustability
- Stiffness (or lack there of)
- Forward Lean
- Size

Choosing the correct boots
- Size
- Flex

Recommended set-up
- Width
- Angles
- High backs (alignment, lean and size)