





PARTNERS IN COACH EDUCATION

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Health and Wellness







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Competition Coaching Introduction Training to Train (Dryland) Cross-Country Skiing

COACH WORKBOOK



The beginning of the growth spurt and the peak of the growth spurt are very significant considerations in the design of training and competition programs. It is essential to identify early, average and late maturing individuals, as this will permit training and competition programs to be designed appropriately (i.e. in relation to optimal trainability and the readiness of an athlete).

Prepared under the authority of Cross Country Canada's Coaching Development Committee



Photo by Stephane Barrette

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Total course time is approximately 18.5 hours

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Introduction

The objectives of this section are to: □ provide an introduction to the Competition Coaching Introduction (CCI) context of the National Coaching Certification Program; and □ provide an overview of the goals and objectives of the CCI – Training to Train (Dryland) Workshop.

Cross Country Canada's Competition Coaching Introduction (CCI) program is a four-step progression of coach education and development opportunities that builds on the first context of the National Coaching Certification Program (NCCP) – the Community Coaching (CC) program.

The CCI program provides tools and develops skills that a coach can use to:

- □ create an enjoyable, team-oriented environment that will encourage athletes to achieve their personal goals in sport;
- design and implement an effective annual sport program that considers the physical, mental, cognitive and emotional maturity of the individual athletes;
- effectively teach advanced ski technique; and
- motivate athletes to develop a lifelong interest in the fitness and health benefits of cross-country skiing.

The first two steps/workshops in the CCI context provide essential information for coaches working with athletes in the Learning to Train (L2T) stage of development. The second two steps/workshops prepare coaches to work with athletes in the Training to Train (T2T) stage of development.

Competition Coaching Introduction (CCI) - Training to Train (Dryland) Workshop

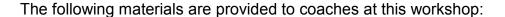
- ☐ Workshop Goals. This workshop is designed to:
 - √ help coaches become more effective and have a more meaningful impact on athletes' experience through the development of five core competencies: problem- solving, valuing, critical thinking, leadership and interaction; and

- ✓ prepare coaches to support athletes in the Training to Train (T2T) stage of athlete development, using a well designed program that takes into consideration optimal trainability and the maturity/readiness of the athlete.
- Workshop Objectives. Having successfully completed the CCI Training to Train (Dryland) Workshop (abbreviated as CCI-T2T (Dryland) Workshop), a coach should be able to do the following:
 - 1) Teach athletes how to build an aerobic base, speed and strength and further develop and consolidate sport specific skills as appropriate for their developmental age.
 - 2) Ensure social and emotional needs are addressed by placing an appropriate emphasis on team-building, group interaction and social activities.
 - 3) Work effectively with others in the cross-country sport system to provide a learning environment that is:
 - ✓ **Enjoyable.** The program is fun and rewarding. It has a strong team component and is comprised of activities that: include an appropriate degree of challenge; fit into the "overall picture"; provide the opportunity for progressive improvement; and involve action.
 - ✓ Ethical and Safe. The program ascribes to the NCCP Code of Ethics, incorporates appropriate safety and risk management procedures, and encourages systematic medical monitoring.
 - ✓ Age-Appropriate. The training focus is tied to the individuals' stage of maturation.
 - ✓ Motivating. Athletes are stimulated by the program and motivated to improve their skills, train and explore their physical and mental limits.
 - ✓ **Encouraging of Self-Reliance.** Athletes are encouraged to develop good self-management skills.
 - ✓ Adaptable to Varying Personal Goals. Athletes are encouraged to set realistic, but challenging individual (as well as team) goals.
 - ✓ Open and Communicative. Active communication between the athletes, parents and coaches relating to goals, objectives, needs and progress is encouraged.
 - ✓ Team, Club and Division-Oriented. The support structure of the team, club and division is valued and respected.

- ✓ Parent Supported. Parents are engaged and supportive of the objectives and methodology of the program.
- 4) Pursue continuous program improvement by monitoring and evaluating the progress of the program towards achieving its goals.
- 5) Pursue continuous self-improvement (developing his/her teaching abilities, general coaching abilities, personal technical skills and knowledge and understanding of competitive skiing).

This workshop is intended to support coaches by providing them with an opportunity to learn and improve their skills. Congratulations and thanks go to those who are taking this step and giving their time to help develop young athletes in Canada.

Getting to Know the Workshop Materials



- ☐ CCI-T2T (Dryland) Workbook; and
- ☐ CCI-T2T (Dryland) Reference Material.

Step #1 - Setting the Scene

The objectives of this step are to:
review key LTAD objectives for the Training to Train (T2T) stage of athlete development;
☐ provide you with an opportunity to reflect on your club program; and
present an overview of the key functions and tasks that coaches at this level undertake.

1.1 Training to Train Stage of Athlete Development

- 1.1.1 Pair up with another coach and review "Stages of LTAD" in your Reference Material (section 1.1). Note that L2T and T2T are the most important stages of athletic preparation. Then discuss the following questions:
 - a. Which goals for the T2T stage caught your attention which ones really stood out?
 - b. Why is developing aerobic capacity during this stage so critical?
 - c. According to the LTAD, what should your program emphasize most during the T2T stage of development?
 - d. Do you feel that you can provide your athletes with the psychological training they need at this stage?
 - e. How well do you think your club program prepares athletes for subsequent stages in the LTAD model (Learning to Compete or Active for Life)?

1.2 Reflections on Your Club Program

1.2.1 Is your club program structured to support skiers in the T2T stage of development? Spend a few minutes on your own and note your answers on the chart on the next page.

	Question	Answer
a.	Does your club offer a year-round program?	
b.	Do you have a sufficient number of committed, NCCP qualified coaches and parent helpers to provide a good quality program?	
C.	Does your program have established benchmarks for this stage of development (physiology, strength, technique, etc.)?	
d.	Does your program provide a generic annual training plan for the group, or do you offer individualized annual training plans?	
e.	Do your athletes compete in 8- 17 races per season depending on where they are in the T2T stage of development?	
f.	Are group interaction, team building and social activities program priorities? Do you feel your program is successful in this regard?	
g.	Is there sufficient funding available to allow you to deliver a successful program?	
h.	Do your coaches systematically monitor and assess the effectiveness of your training programs?	

1.2.2 In groups of three review the "CCC Athlete Development Grid" for athletes in the T2T – 1 and T2T – 2 stages of development (section 1.2 in the Reference

Material). Discuss what you have been doing in your club(s) and, based on what you learned about this stage from the LTAD objectives and Athlete Grid, if there are any changes you should be making to your respective programs. Following this exchange, note on your Action Card at the end of this step any new ideas that you wish to remember.

1.2.3	Spend a few minutes on your own and record what you think are your own
	clubs' three biggest challenges in implementing a successful program for this
	age group.

a.

b.

C.

1.3 Your Changing Functions and Tasks as a Coach

1.3.1 What are your reasons for wanting to coach athletes in the T2T stage of development? Record below the three points that you consider most important.

a.

b.

C.

- 1.3.2 Have your reasons for being involved changed since you began coaching? Pair up with another coach and discuss why you want to coach athletes in the T2T stage of development, and what your objectives are. Note any changes you would like to make to the answers you gave in question 1.3.1.
- 1.3.3 Refer to and review "Functions and Tasks as a Coach" in your Reference Material (section 1.3). This section outlines the key functions that coaches generally need to fulfill when they work with athletes in the T2T stage of development.
- 1.3.4 The Facilitator will lead a short group discussion/exchange on the role of coaches working with this age group.
- 1.3.5 Record on your Action Card at the end of this step any specific points you wish to remember.

ACTIONS FOR SETTING THE SCENE

GREAT IDEAS:
I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: In addition to physical, technical and tactical development – including decision-making skills – the mental, cognitive and emotional development of athletes needs to be addressed. This includes an emphasis on ethics, fair play, and character building. All programming should be designed to address these concepts throughout the various stages.

Step #2 – Growth and Maturation

Th	e objectives of this step are to:
۵	provide you with a comprehensive overview of growth and maturation and the implications on training and performance for developing athletes; and
0	present you with tools to assist you in taking developmental age-related considerations into account when designing your programs.
2.1	Early vs Late Developers
2.1.1	Why is it essential for coaches to identify early, average and late maturing athletes? Note your points below.
	a.
	b.
	C.
	d.
2.1.2	Talk to some of the other coaches about this, and write down any ideas you would like to add to your list.
2.1.3	Consult sections 2.1 and 2.3.1 of the Reference Material. What changes would you now make to question 2.1.1 above? Add your new comments to your notes.

2.2 Peak Height Velocity

- 2.2.1 Peak Height Velocity (PHV) is the maximum rate of growth in stature during the adolescent growth spurt. It can be used as a guide to growth and physical maturity during adolescence. Refer to section 2.2 of your Reference Material and review the information on growth phases and how to measure both growth and PHV.
- 2.2.2 The Facilitator will lead a session on how to measure standing height, fill in a Standing Height Chart and plot a Velocity Curve for Standing Height.
- 2.2.3 Use your Action Card to note any specific points that you want to remember.

2.3 Windows of Optimal Trainability (WOT)

- 2.3.1 Refer to "Figure 2.13" in your Reference Material (section 2.3) and record below the windows of optimal accelerated development (trainability) that occur during the T2T stage of athlete development. Also note the relative significance of each emphases of training (i.e. for female athletes approximately 85% of the speed 2 window occurs during this stage).
 - a. For male athletes:
 - b. For female athletes:

2.4 Designing Your Program to Reflect Developmental Age Considerations

2.4.1 In groups of three discuss how your clubs currently address the various important developmental age-related considerations, including gender differences, in designing programs for athletes in the T2T stage?

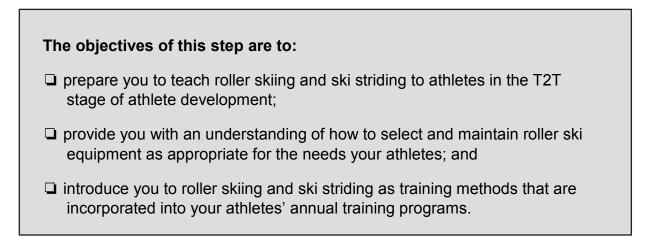
2.4.2	Together discuss if there are any changes you should be making to your respective programs in order to design an optimal training and competition program and better motivate athletes to stay involved. Write down the three improvements/ changes you think are the most important.
	a.
	b.
	C.
2.4.3	The Facilitator will lead a group discussion where you will be asked to present to the others how you would like to improve your program.
2.5	Getting the Message Across
2.5.1	Write below some ways you could keep your athletes and their parents informed about: (1) the relative age effect; and (2) the importance of measuring growth and maturation. Concentrate on how to get your message across, rather than what message to deliver.
2.5.2	Take a moment and jot down on your Action Card any points you wish to remember.

ACTIONS FOR GROWTH AND MATURATION

GREAT IDEAS:
I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: If relative age (which is only a 10-12 month difference) can have such a significant impact on selection, participation and performance, then it is obvious that developmental age (which may be four to five years difference) can have a huge impact. It is therefore essential for a coach to have a good understanding of the maturation process and its consequences and take developmental age-related considerations into account when designing their programs.

Step #3 - Dryland Techniques



3.1 Roller Skiing and Ski Striding

- 3.1.1 Your group will meet at a pre-designated area with roller ski and ski striding equipment, ready to go.
- 3.1.2 The Facilitator will lead the outdoor sessions on roller skiing and ski striding. Afterwards the group will return to the classroom.

3.2 Equipment Selection and Maintenance

- 3.2.1 The Facilitator will:
 - a. lead a session on how to select and maintain roller ski equipment that is appropriate for the age and skill level of the athletes you are coaching; and
 - b. lead a question and answer period on the dryland techniques you learned about during the outdoor session.
- 3.2.2 Take a few minutes on your own to jot down on your Action Card any points that you wish to remember.

3.3 Dryland Techniques and Annual Training Programs

3.3.1	In groups of three review "Dryland Techniques and Training Programs" in the
	Reference Material (section 3.3) and discuss ways in which roller skiing and ski
	striding can be used for (a) developing technique and (b) training purposes for
	athletes in the T2T stage of athlete development.

3.3.2	Together discuss how you are currently incorporating these training methods
	into your annual training plans, and if there are any changes you should make.
	If applicable, write down two improvements/changes that you think would be
	the most important to implement.

a.

b.

- 3.3.3 The Facilitator will lead a group discussion where you will be asked to present to the others how you plan to improve your program.
- 3.3.4 What did you learn from this exercise? Make applicable notes on your Action Card on the next page.

ACTIONS FOR DRYLAND TECHNIQUES

GREAT IDEAS:
I INTEND TO IMPLEMENT THEM BY:
I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: The use of a bike to teach roller ski sessions allows the flexibility needed to observe and give feedback to all the skiers in a group.

Step #4 - Energy Systems

The objectives of this step are to:
refine your understanding of alactic, anaerobic lactic and aerobic energy processes;
□ relate relevant training zones for athletes in the T2T stage of development to the lactate curve and ski specific situations;
help you determine what should be measured and how often is it appropriate to "test" T2T athletes;
☐ provide you with guidelines for developing aerobic fitness; and
☐ provide you with tools for tracking training responses.

4.1 Energy Processes

- 4.1.1 The body uses anaerobic and aerobic processes to create the energy required to do its work. Pair up with another coach, review and discuss "Energy Systems Overview" in your Reference Material (section 4.1). Then use the Reference Material to help you write a brief explanation for each of the following:
 - a. Anaerobic Processes
 - Alactic
 - Lactic
 - b. Aerobic Processes

4.1.2	The Facilitator will now demonstrate how you can relate the different energy processes to a basic incremental lactate curve in training response.
4.2	Training Intensities
4.2.1	Review "Training Intensities Overview" in your Reference Material (section 4.2) and then note below the five training zones used for athletes in the T2T stage of development.
	a.
	b
	C.
	d.
	e.
4.2.2	Using the Karvonen method, determine what would the target HR range be for an athlete who has a Max HR of 200 and a RHR of 65?

a discussion on how the zones relate to ski specific situations.

4.2.3 The Facilitator will demonstrate how you can relate the zones to the lactate

curve shown in "Figure 4.9" in the Reference Material (section 4.2.2), and lead

4.3 Training Response

4.3.1 In groups of three discuss how training response should be measured, and how often athletes should be "tested" during the T2T stage of development. Then note below what types of monitoring are appropriate for this stage. a. b. C. d. 4.3.2 Refer to and review "Testing T2T Athletes" in your Reference Material (section 4.2.6). Based on this information, add any additional notes you may wish to make to your answer to question 4.3.1. 4.3.3 What did you learn from this step? Record on your Action Card on the next page any specific points you wish to remember.

ACTIONS FOR ENERGY SYSTEMS

GREAT IDEAS: I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: After the onset of PHV, aerobic training should be a priority. At the same time it is important to maintain or further develop levels of skill, speed, strength and flexibility.

Step #5 - Managing a Sport Program

The objectives of this step are to:
☐ Explore communication technology available to coaches
☐ Develop trip organization protocols
☐ Improve athlete racing support at a competition

5.1 Communication

5.1.1 There are many communication tools available to coaches and club staff in today's digital age. Reviewing section 5.1.1 in your reference manual, complete the following table.

Communication Tool	Appropriate Information Communicated via this Medium.	Intended Audience
Email		
Facebook		
Twitter		
Website		
Online Calendar (Google Calendar)		
Online Documents (Google Docs)		
Online Athlete Monitoring Tools (training peaks)		

Dropbox	
Google Forms	
Survey monkey, doodle poll	
ivolunteer	
Blog	
Ubersense, Coaches Eye	
Youtube, Sprongo, etc.	

5.1.2 Describe other communication tools your club uses to distribute information?

5.2 Organizing a race trip

Partner with another coach and complete the following race trip "to do list' for the first race of the upcoming season. Bullet points only. Refer to "to do' list (section 5.2) of your reference material. Assume your team consists of 10 athletes (5 male, 5 female) all juvenile category racers.

Organizational Details	Things to Consider
Who is going on the trip?	•
Where and when is the trip?	•

What are the transportation considerations?	•
Where will the team be staying?	•
What will the event cost?	•
Communication of trip information.	•
Onsite logistics	•

5.3 Supporting Athletes at a Race

- 5.3.1 Create a schedule of activities for working with athletes the day before a race, away from home. What are the key pointers you are reminding athletes?
- 5.3.2 Working with another coach list the essential information you need from the Team Captains' Meeting to ensure your athletes are well prepared for the next day's race. Upon completing your list compare your answers to the Team Captains' Meeting notes table in section 5.3 of your reference material.
- 5.3.3 What additional information would you add to the Team Captains' Meeting's notes to prepare your athletes during your team meeting?

5.4 Self-Assessment

5.4.1 What did you learn from this exercise? Make applicable notes on your Action Card at the end of this step.

ACTIONS FOR DESIGNING A SPORT PROGRAM GREAT IDEAS:

11	NTEND TO IMPLEME	ENT THEM BY:	
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	NTEND TO IMPLEME	ENT THEM BY:	
	NTEND TO IMPLEME	ENT THEM BY:	
	NTEND TO IMPLEME	ENT THEM BY:	

Coaching Tip: Later in the Training to Train stage an athlete should be doing sport-specific training six times a week during the ski season (including some complementary training), and maintaining training six times a week during the off-season (incremental specific training with the major emphasis still on complementary sports).

Step #6 – Flexibility Training

-	The objectives of this step are to:
[☐ prepare you to teach age-appropriate flexibility exercises to athletes in the T2T stage of development;
[☐ teach you about flexibility assessments;
[☐ help you develop a flexibility program that meets the needs of your athletes; and
[☐ introduce you to safety considerations.
6.1	Why Flexibility Training is Important
6.1. ⁻	Suppleness (flexibility) is one of the five basic S's of training and performance. Based on what you have learned previously, record below four reasons why you think flexibility training is an important component of a cross-country skier's annual training plan.
	a.
	b.
	С
	d.

6.1.2	How do your points compare to the information provided in "Introduction to
	Flexibility Training" in your Reference Material (section 6.1). Note on your list in
	question 6.1.1 any changes or additional points you would like to make.

6.2 Flexibility Assessments

- 6.2.1 Review Stretching Guidelines under sections 6.2 of the Reference Material.
 - a. At what age do athletes tend to start losing flexibility more quickly if not trained?
 - b. For how long must a stretch be held to have an optimal impact?
 - c. When should stretching be planned within a practice?
 - d. What is the suggested progression to introduce flexibility training and how many times per week should flexibility be trained to be developed?
- 6.2.2 Review "Testing Flexibility" in the Reference Material (section 6.6). The Facilitator will then demonstrate how to do an age-appropriate flexibility assessment for a developing athlete.

6.3 Flexibility Exercises

- 6.3.1 Your group will now prepare for a practical session on flexibility exercises that are appropriate for athletes in the T2T stage of development.
- 6.3.2 The Facilitator will show the group examples of suitable exercises; help the group learn the exercises; and provide tips on how to teach these exercises effectively.
- 6.3.3 When the practical session is finished the Facilitator will lead a short group discussion on ways in which you can minimize risk factors associated with flexibility training.
- 6.3.4 Note on your Action Card any specific points that you wish to remember.

6.4 Designing a Flexibility Program

- 6.4.1 The Facilitator will divide the class into sub-groups, each assigned with the task of explaining the characteristics and benefits of one of the following static, dynamic or PNF stretching and if, how and when that particular stretching method should be used for athletes in this age range. Refer to 'Guidelines for developing flexibility' (section 6.2) and 'Other types of flexibility training' (section 6.4) in the Reference Material to help you with this assignment.
- 6.4.2 Each sub-group will present their findings to the larger group for further discussion.
- 6.4.3 The Facilitator will lead a group discussion on:
 - a. Which flexibility methods should be incorporated into an athlete's annual training plan?
 - b. When flexibility training should occur?
 - c. Motivating your athletes to do it.
- 6.4.4 Spend a few minutes on your own and record on your Action Card what you learned during this step.

ACTIONS FOR FLEXIBILITY TRAINING GREAT IDEAS:

INTEND TO IMPLEMENT THEM BY:

Coaching Tip: Flexibility training should be emphasized during the Training to Train stage of development given the rapid growth of bones, tendons, ligaments and muscles at this period in the athletes' development.

Step #7 - Exercise Performance and Health

The objectives of this step are to:
☐ provide you with general information on health and performance;
☐ help you determine the medical monitoring needs of your athletes; and
☐ introduce you to travel and health considerations.

7.1 Planning for a Healthy Team

7.1.1 During a pre-season information session with the parents, someone asks you whether endurance athletes should have serum ferritin tests during this stage of development. Someone else asks you whether over-use injuries are common in the sport of cross-country skiing, and if so what your program does to ensure your athletes remain healthy. Note below what you would say to these parents.

- 7.1.2 Talk to some of the other coaches about this and add any ideas you might have missed in question 7.1.1.
- 7.1.3 Consult sections 7.3 on "Medical Monitoring" and section 7.1 c) on "Repetitive Motion Injuries" in your reference materials. What changes would you now make to your first answer?

7.2 Medical Monitoring for T2T Athletes

- 7.2.1 Pair up with another coach, review and discuss "*Medical Monitoring*" in the Reference Material (section 7.3). Use the Reference Material to help you answer the following questions.
 - a. When is it appropriate to introduce medical monitoring?
 - b. What kinds of assessments are appropriate for athletes during the T2T stage of development?
 - •
 - •
 - •
 - •
 - c. Who is responsible for keeping records?
- 7.2.2 When you have completed question 7.2.1 the Facilitator will lead a short group discussion on this subject.

7.3 Dealing with Injuries and Sickness

- 7.3.1 The Facilitator will break you into groups of three to discuss the following. After addressing a question, note your comments below it.
 - a. Besides repetitive motion injuries, what are some common training injuries that cross-country skiers are prone to, and how can they be prevented?

	b. If one of your athletes is sick with a cold or the flu, what training advice should you give them?
7.3.2	Take a few minutes on your own and review "Disease and Sanitation" in your Reference Material (section 7.2). Record any new ideas you might wish to add to your answers to question 7.3.1.
7.4	Travel and Health Considerations
7.4.1	At this stage travel begins to become an important part of racing. What are some best travel management practices? Record below three practices that you believe are the most important with respect to keeping your athletes healthy. Rank them in order of importance.
	a.
	b.
	C.
7.4.2	Together with your partner coach, review and discuss "Travel and Health Considerations" in the Reference Material (section 7.4). Note on your list any changes or additional points you would like to make.
7.4.3	What did you learn from this step? Make applicable notes on your Action Card.

ACTIONS FOR EXERCISE PERFORMANCE AND HEALTH

GREAT IDEAS: I INTEND TO IMPLEMENT THEM BY: Coaching Tip: Systematic medical monitoring should be introduced at the Training to Train stage of athlete development.

Step #8 - Strength Training

The objectives of this step are to:
prepare you to teach age-appropriate strength exercises to athletes in the T2T stage of development;
☐ teach you about strength assessments and monitoring;
☐ help you develop a strength program that meets the needs of your athletes; and
☐ introduce you to safety considerations.

8.1 Strength Training Considerations

- 8.1.1 Strength is one of the five basic S's of training and performance. Based on what you have learned previously, and taking into consideration the windows of optimal trainability presented in section 2.3 of your Reference Material, record below the strength training considerations for male and female athletes during the T2T stage of development.
 - a. Importance of strength training during the T2T stage
 - b. Most specific types of strength training for cross country skiers
 - c. Strength training methods for cross country skiers
 - d. Differences between males and females during the T2T stage

8.1.2 How do your points compare to the information provided in "Introduction to Strength Training" in your Reference Material (section 8.1). Note on your list in 8.1.1 any changes or additional points you would like to make.

8.2 Strength Exercises

- 8.2.1 Your group will now prepare for a practical session on strength exercises that are appropriate for athletes in the T2T stage of development.
- 8.2.2 The Facilitator will show the group examples of suitable exercises; help the group learn the exercises; and provide tips on how to teach these exercises effectively.
- 8.2.3 When the practical session is finished the Facilitator will lead a short group discussion on ways to minimize the risk factors associated with strength training.
- 8.2.4 Note on your Action Card any specific points that you wish to remember.

8.3 Designing a Strength Program

- 8.3.1 The Facilitator will divide the class into sub-groups, each assigned with the task of developing a strength training program for a mesocycle (2-4 weeks) specific to each period of the year spring (1st part of general preparation); summer (2nd part of general preparation); fall (specific preparation) and winter (maintenance) for athletes in the T2T stage of development. Refer to "Devising a Strength Training Program" in the Reference Material (section 8.3) to help you with this assignment.
- 8.3.2 Each sub-group will present their findings to the larger group for further discussion.
- 8.3.3 The Facilitator will lead a group discussion on:
 - a. What types of strength training benefit a cross-country skier?
 - b. Incorporating strength training into a T2T athletes' annual training plan.

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- c. Motivating your athletes to do it.
- 8.3.4 Spend a few minutes on your own and record on your Action Card what you learned during this step.

8.4 Strength Assessments

- 8.4.1 Review "Strength Assessments" in the Reference Material (section 8.4). Next, pull out the "CCC National Strength Test Protocol" (section 8.4.1). The Facilitator will then demonstrate how to do an age-appropriate strength assessment for an athlete in the T2T stage of development. Use this information to help you answer the following questions:
 - a. At what age should strength assessments begin?
 - b. When (what time of year) should you do the assessments?
 - c. Where should you do the assessments?
 - d. What equipment and/or tools do you need?
 - e. Who is responsible for keeping records?
- 8.4.2 The Facilitator will lead a group discussion on other strength resources available in CCC's Athlete Development Matrix.

ACTIONS FOR STRENGTH TRAINING

GREAT IDEAS: I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: Core strength should be considered the number one priority in strength training.

Step #9 – Practice Coaching Session

The objectives of this step are to: □ prepare you to lead a roller ski session for athletes in the T2T stage of development; and □ prepare you to introduce fundamental ski simulation techniques, including roller skiing, to the athletes you coach.

9.1 Preparing to Lead a Roller Ski Session

- 9.1.1 You will be assigned a skill/technique to teach. Take a few minutes to review the key characteristics in section 3 of the Reference Material and think of an appropriate game to teach it.
- 9.1.2 Review "Safety Checklist: Dryland Training" (section 9.1 of reference material) and "CCC Rollerskiing policy" (section 9.2 of reference material). Then pull out the "Practice Planning Self-Assessment sheet" from the Reference Material (section 9.5). Plan how you will teach your game/activity using the self-assessment sheet as a guide.
- 9.1.3 Prepare for the outdoor session.

9.2 Implementation

- 9.2.1 As a group, complete a five-minute safety check of the area you will be using for your practice session.
- 9.2.2 If your turn is first, use the other coaches as your participants and teach the skill/ technique you have been assigned. You will only have five minutes to set up, teach your game and listen to a few feedback points from the Facilitator.
- 9.2.3 Take five minutes to complete your self-assessment sheet.
- 9.2.4 Jump back in and be a participant while the other coaches practice coaching.
- 9.2.5 Return to the classroom with the rest of the group. Spend a few minutes on your own and note on your Action Card at the end of this step what you learned from the practice coaching session.

ACTIONS FOR PRACTICE COACHING SESSION GREAT IDEAS:

	I INTEND TO IMPLEMENT THEM BY:
	TINTEND TO IMPLEMENT THEM BY.
aching Tip:	Introduce basic sport science and sport medicine support at the
ining to Train	n stage.

Step #10 – Designing a Yearly Training Plan

10.1 Analyzing Your Program

10.1.1 A sport program is a planned and progressive sequencing of activities. The nature, number, frequency, duration and content of these activities is adapted to athletes' age and sport experience. The goal of the program is to foster athletes' athletic development and sport form over time.

In the CCI-L2T (Dryland) workshop you evaluated how your club supported athletes in the L2T stage of development (Step #3), and then you learned how to improve the design of your sport program (Step #6) for that age group. This section will take you to the next step, which is to help you analyze and develop a successful sport program for athletes in the T2T stage of development.

- 10.1.2 Pull out the "Windows of Optimal Trainability" (WOT) chart and "CCC Athlete Development Grid" in your Reference Material (sections 1.2 and 2.3). Based on what you've learned about long-term athlete development to date, the information on WOT and the Athlete Grid, assess whether your sport program:
 - () features the necessary development opportunities to prepare athletes for subsequent stages in the athlete development progression; or
 - () contains significant gaps as far as opportunities for athletic development are concerned.

I think this happens because.....

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	ist below the three most important areas of improvement you think your rogram should focus on, in order of priority:
	a.
	b.
	C.
10.2	Periodization
10.2.1	Why do you think it is important for an athlete in the T2T stage of development to have a yearly training plan? Note your reasons below.
	a.
	b.
	C.
	Review " <i>Periodization</i> " in your Reference Material (section 10.1) and add any points you may have missed in question 10.2.1.

10.3 Phases of a Yearly Training Plan (YTP)

- 10.3.1 Pair up with another coach and read "Phases of a Yearly Training Plan" in your Reference Material (section 10.2). Discuss the different phases and subphases that would be used in designing a YTP for a cross- country skier.
- 10.3.2 With your partner coach discuss the terms on the following page and take a minute to jot down how you would explain each of them to your athletes.
 - a. Monocycle Sport
 - b. Macrocycles
 - · Preparation Period
 - Competitive Period
 - Transition Period
 - c. Mesocycles
 - d. Micocycles

10.4 Steps to Designing a Yearly Training Plan

10.4.1 There are five steps that should be taken into consideration when designing a YTP. The Facilitator will break your group up into five sub-groups – one for each "step". Each sub-group will be responsible for reviewing the step they have been assigned (see "Steps to Designing a Yearly Training Plan" in section 10.3 of your Reference Material), summarizing it, and reporting on it to the larger group.

- 10.4.2 Together with the coach you are working with, pull out the chart in section 10.3.4 in your Reference Material "Quantifying Training Loads: Volumes and Intensities". Next, determine an athlete or training group that you think would be suitable to use for the following exercise, and work out the percentage of time you believe they spent in each of the five basic S's in each of the four training phases identified on the chart. If you require more information on the basic S's refer to the "Five Basic S's of Training and Performance" in your Reference Material (section 2.3.2).
- 10.4.3 The Facilitator will ask one or more of the sub-groups to present their percentages for the five S's to the overall group.
- 10.4.4 With your partner coach, create an athlete in the T2T stage of development that you would like to work with determine their developmental age, gender, general sport background and background in cross-country skiing. Also determine their competitive goal for the planning year under discussion (Provincial Winter Games, Provincial Championships, Eastern/Western Canadian Championships, National Championships, etc.). The Facilitator will provide you with the dates of these events in your province/territory.
- 10.4.5 Pull out a blank "Yearly Training Plan" from your Reference Material (Appendix 2) and together with your partner coach, draft in a very basic training program for your athlete.
- 10.4.6 Once you have finished the Facilitator will lead a group discussion on training program design.
- 10.4.7 Note on your Action Card at the end of this step any specific points you wish to remember about designing annual training programs.

10.5 Monitoring, Re-evaluating and Adjusting Training Plans

10.5.1 Throughout the training and competition year, athlete and coach need to monitor and assess the effectiveness of the training program. Pair up with another coach and discuss some possible monitoring tools. Record below the tools you think are the most important for athletes at this stage of development.

a.

b.

C.

- 10.5.2 Together with your partner coach, refer to and discuss "Monitoring, Reevaluating and Adjusting Training Plans" in your Reference Material (section 10.3.5). Compare your answers to question 10.4.2 with the information in the Reference Material and note on your list any changes or additional points you wish to remember.
- 10.5.3 Take a minute on your own and review the Training Diaries in the Reference Material (Appendix 3 and 4).
- 10.5.4 The Facilitator will lead a group discussion on training diaries when to introduce them, what kind of information to ask for, how to motivate your athletes to use them, etc.
- 10.5.5 What did you learn from this exercise? Make applicable notes on your Action Card at the end of this step.

predisposition.

ACTIONS FOR DESIGNING A YEARLY TRAINING PLAN

GREAT IDEAS:
I INTEND TO IMPLEMENT THEM BY:
Coaching Tip: At the Training to Train stage, narrow the focus to two sports based on

Step #11 – From YTP to Practice Plan

The objectives of this step are to:	
☐ provide an overview of building a robust and functional seasonal plan	
☐ provide guidance to help you translate seasonal plans in to weekly plan	
provide guidance to help you build practice plans which follow from goals in YTP and season plans.	

11.1 Linking Sport Programs and Practice Sessions

11.1.1 The sport programs that you've read about and worked with yourself show how training programs and objectives change over the course of a program. This component of the workshop describes how to use information about the program to choose the content of individual practice sessions.

In particular, this component presents a step-by-step process for linking your program's orientation to the activities of a practice.

11.2 Translation of YTP to Seasonal Plan

- 11.2.1 Using the Seasonal Plan Template in Appendix 2 create one cycle of a seasonal plan using your YTP for a T2T athlete. Refer to the sample seasonal plan (section 11.1 figure 2) and explanation found in your reference material. Complete this process with another coach.
- 11.2.2 Compare your seasonal plan with the plan of another coach and note any good ideas they developed in their plan.

11.3 Building a Weekly Training Plan

11.3.1 Using the weekly training plan template found in Appendix 1 and the Seasonal plan you created in question 11.1.1 above follow the step by step instruction in the 'building a weekly training plan' section of the reference material to create a one week training plan. Ensure that you are taking into consideration your club's training schedule and individual athlete training time when building your plan. You may complete this exercise with another coach.

11.3.2 Take a few minutes to share your weekly plan with another group. Note any novel or interesting workouts that their athletes are completing.

11.4 Building a Practice Plan

- 11.4.1 Choosing a team practice from your weekly practice plan created in question 11.3 above follow the step by step instruction in the 'creating a practice plan' section of the reference material to create a practice plan. You can use the practice plan template provided in section 11.3 of your reference material. Ensure that you are taking into consideration your club's training location and training time when building your plan. You may complete this exercise with another coach.
- 11.4.2 Having now completed this section, reflect on how you currently create seasonal, weekly and practice plans. What modifications would you make to your process? How can you build a more complete and powerful training program for your athletes?

ACTIONS FOR YTP TO PRACTICE PLAN

GREAT IDEAS: I INTEND TO IMPLEMENT THEM BY:

Coaching Tip: Training plans are essential but they remain guides. Coaches should never be afraid of updating their plans when warranted.

Step #12 - Workshop Wrap-up and Evaluation

The objectives of this step are to:
provide an overview of the next step in the NCCP progression for the sport of cross-country skiing;
☐ provide guidance to help you with the CCI certification process; and
provide an opportunity for you to provide feedback that will help improve future workshops.

12.1 The CCI Certification Process

- 12.1.1 Refer to the "CCI Advanced Certification Process" and "CCI Advanced Coach Pathway" in your Reference Material (sections 12.1 and 12.2) to find an outline of the next steps in the CCI Advanced context.
- 12.1.2 The Facilitator will lead a discussion on what needs to be done to complete the certification process at this level.

12.2 Evaluation

- 12.2.1 Take a few minutes to share ideas that you have learned and exchange contact information with the other coaches.
- 12.2.2 Please complete the "Workshop *Evaluation Form*" also found in the Reference Material (section 12.3) and take it to the Facilitator. Your feedback is important.

Cross Country Canada and the National Coaching Certification Program thank you for the time you dedicate to coaching. Your efforts make a difference in the lives of those you coach. Congratulations on completing the workshop!



