



# ***THE WHOLE PLAYER DEVELOPMENT PATHWAY***



A project like this requires skill, experience, collaboration, effort, commitment and teamwork, and Tennis Canada would like to thank the following contributors, supporters, and partners:

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# WELCOME

We are grateful to all the private sector experts, clubs, academies, provincial and Territorial Tennis Association partners, volunteers, parents, players, families, staff, and board members who provided inspirational leadership and contributed to the success of Canadian tennis.

Canadian tennis has come a long way over the past 40 years. It takes a village to raise a child, and, in this case, it takes a village to grow, develop, and promote our great sport and make Canada a leading tennis nation. A big thank you to everyone who contributed to our sport in Canada and special thanks to those who helped create the Whole Player Development Pathway.

Our success is a collective effort. The commitment and sacrifices made by athletes, families, and coaches across our entire system are admirable. The energy and resources required to achieve a player's potential are real, and the rewards are well worth it. The process isn't easy, but the returns go beyond winning as the character and life skills gained by everyone who embarks on this journey are the keys to developing better people. Many of the world's top players have inspiring stories, worked hard, and overcame adversity to become role models for Canadians.

Our sport celebrates diversity, inclusivity, and accessibility and has awakened national pride and inspiration in the many people who play and follow tennis. We will continue to work in these areas, and we recognize that more barriers must still be lifted to make our sport more diverse, equitable, accessible, and inclusive for girls and women, individuals with disabilities, Indigenous people, newcomers to Canada, members the 2SLGBTQ+ communities, aging adults, and those living in poverty and isolated communities.

The years of hard work invested by many have led to historic success and helped realize our not-for-profit mission and purpose to grow, develop, promote, and improve the health and well-being of Canadians through positive tennis experiences. Canada's Grand Slam singles, doubles, and mixed doubles champions, Top 10 and world-class players, Parapan Am gold medalist, and Paralympic, Olympic, Davis Cup and Billie Jean King Cup team members have inspired many Canadians to follow and play tennis, as we strive to be a leading tennis nation.



**Hatem McDadi,**  
Senior Vice President, High-Performance Development



**We believe all Canadians should have the opportunity to play and enjoy the sport of tennis and have an environment that allows them to reach their full potential on and off the court. The Whole Player Development Pathway has been developed as a road map to help guide Canadians on the various stages and pathways available to help players enjoy tennis for life.**

With the above in mind, Canadian tennis aspires to be among the world's leading tennis nations by creating positive tennis experiences for everyone in safe, welcoming, and inclusive environments. In addition, the whole player development pathway was developed based on best practices and research to help each player understand their own journey to reaching their potential. As a sport of choice for all Canadians, tennis provides a myriad of benefits, including enjoyment and well-being, better physical and mental health, social bonding, and the opportunity to develop life skills. It also provides a pathway to be among the best in the world and among the Top 100 ranked players internationally with the potential to achieve results at the highest level.

### **Developing great people and players**

From the first shots to the highest levels, the Whole Player Development Pathway (WPDP) provides recommendations for various development stages and pathways. The WPDP also provides guidelines for training and competition to help players achieve their potential and, ultimately, enjoy tennis for life. This holistic approach aims to develop great tennis players—and great people who can be role models and inspire future generations of tennis players, fans, supporters and Canadians.



# The Whole Player Development Pathway



The 7 stages to develop tennis players, achieve excellence, and help them embrace a lifelong tennis journey.



### **WPDP: It's about the journey**

The WPDP is about progressing and improving to build an ecosystem that helps foster an environment for players to reach their potential. Providing the best possible experience, in the best possible environment, for as long as possible. It reinforces the idea that long-term development is important to sport performance and to a life-long commitment to physical activity for good health.

Player development is a process that takes time. It is important to acknowledge that sport and physical activity should look very different based on each individual's journey and stage of development.

For competitive players, the process builds the entire athlete through the 5Cs of coaching to provide tools for success at various levels and ultimately on the world stage. In addition, the WPDP identifies qualities associated with grit as these help achieve on and off-court success. The WPDP creates an environment that values players and individuals and their tennis ambitions. And for those who play as part of the sport for life pathway, it provides skills and opportunities to live a healthy and balanced lifestyle.

Effective development requires the alignment of ALL the ecosystem elements, from community programming to targeted high-performance excellence, and that involves many partners.

### **5Cs of coaching**

The WPDP framework is designed around the 5Cs of skill development that helps develop a well-balanced player and individual with the following key components:



# THE 5Cs



## **Culture**

The sum total of all of our behaviours and actions, verbal and nonverbal, on and off the court: A way of doing the right things.



## **Character**

Leadership skills at each age and stage of development.



## **Confidence**

Psychological development that supports self-confidence: The process on the path to developing resilience.



## **Connection**

Social and emotional development focused on relationships and connectivity in an increasingly disconnected world.



## **Competence**

Tactical, technical, and physical development recommendations, from fundamental movement skills through sport-specific tennis training based on age and level.



# ***PLAYER DEVELOPMENT PATHWAYS TO THE TOP 100***

There is more than one pathway to attain the highest levels in tennis. Many accomplished players start tennis at an early age, while some begin their journeys in the later stages of the pathway and also pursue college tennis to allow more time to develop holistically.

Along the way, depending on the evolution of the player's development, some players will stay in the early stages longer than others and at a later age some will enter the pro circuit faster than others.

With the above in mind, four high-performance player pathways have been identified based on historical player development paths observed to attain WTA and ATP Top 100 rankings. Each player's training and competition will depend on the player's pathway (see Appendix A: **Recommendations for training and competition volumes**). We have numerous examples of Canadian players like Félix Auger-Aliassime, Denis Shapovalov, Bianca Andreescu, Leylah Annie Fernandez, Rebecca Marino, Carol Zhao, and Brayden Schnur that pursued various pathways. On the international scene players such as Serena and Venus Williams, Rafael Nadal, Lorenzo Sonego, Jannick Sinner, Nuria Párrizas Díaz, Coco Vandeweghe, Ben Shelton, Ashleigh Barty, and Danielle Collins all pursued different routes to success. All of these examples achieved the highest levels of tennis through one of the 4 pathways or through a mix of them.





# THE TOP 100

We recognize that the development conditions will vary for each player given their unique skills and maturation rates. With this in mind, the WPDP has identified four distinct player development pathways and has included key training, competition, and overall development skills required at each stage of their development. The four pathways are as follows:

<b>Pathway A*</b> <b>Description</b>	<p>The player started playing tennis at 5 or 6 years of age, and the family identified tennis as their primary sport early on. They were active in other sports and physical activities but only as complementary leisure and education.</p> <ul style="list-style-type: none"><li>• Player entered the Top 100 between 19 and 21 years of age and eventually the Top 50 a few years later.</li></ul>
<b>Pathway B*</b> <b>Description</b>	<p>The player started playing tennis at 6 or 7 years of age and was involved in other sports until the age of 12 or 13 when they dedicated themselves to tennis. They had multiple experiences in other competitive sports and physical activities, especially before the age of 12 or 13.</p> <ul style="list-style-type: none"><li>• Player entered the Top 100 between 19 and 21 years of age and eventually the Top 50 a few years later.</li></ul>
<b>Pathway C*</b> <b>Description</b>	<p>The player started playing tennis later than players in Pathway A and B, between 9 and 11 years of age. They played other sports, and by 13 to 15 years of age, they dedicated themselves to tennis. They were very active outside tennis, in other competitive sports or physical activities, at a young age.</p> <ul style="list-style-type: none"><li>• Player entered the Top 100 at 22 or 23 years of age and eventually the Top 50 a few years later.</li></ul>
<b>Pathway D*</b> <b>Description</b>	<p>The player initially followed pathways A, B, or C and then remained in development stage 6 for an extended period of time (or even between stages 5 and 6) for various reasons (e.g., due to a lengthy injury, the struggle to find the mental pathway (stage 6), or the decision to play college tennis (NCAA) and then transition to the pro tour after graduation).</p> <ul style="list-style-type: none"><li>• Player entered the Top 100 between 22 and 25 years of age and eventually the Top 50 a few years later.</li></ul>

# ***THE 7 STAGES AND TENNIS FOR LIFE PATHWAY***

In addition to the 4 distinct pathways to the Top 100, the WPDP identifies 7 stages of development depending on the pathway each player has chosen.

This resource will help provide important information for each stage of development including the following helpful components:


- Introduction to the development and performance indicators
- Development traits within each of the 5Cs
- Key messages for each stage and supplementary materials to help guide players, coaches and parents on the needs required to develop optimally at these stages.
- Measurement framework
- A detailed breakdown of various components related to training, competing and developing key skills and traits for these stages

## **Early Specialization, Generalist, and Late Bloomers**

Each tennis journey to the top is unique, and we encourage each family, player, coach and support group to determine what is best for them. The work done by David Epstein is helpful to read and digest to put this in perspective while considering the four pathways identified earlier given the nature of player development for tennis. The following captures the research and commentary for consideration as you embark on this worthy journey.

Plenty of experts argue that anyone who wants to develop a skill, play an instrument, or lead their field should start early, focus intensely, and rack up as many hours of deliberate practice as possible. If you dabble or delay, you'll never catch up to the people who got a head start. But a closer look at research on the world's top performers, from professional athletes to Nobel laureates, shows that early specialization is the exception, not the rule.

David Epstein examined the world's most successful athletes, artists, musicians, inventors, forecasters and scientists. He discovered that in most fields—especially those that are complex and unpredictable—generalists, not specialists, are primed to excel. Generalists often find their path late, and they juggle many interests rather than focusing on one. They're also more creative, more agile, and able to make connections their more specialized peers can't see.



Provocative, rigorous, and engrossing, David Epstein's book *Range* makes a compelling case for actively cultivating inefficiency. Failing a test is the best way to learn. Frequent quitters end up with the most fulfilling careers. The most impactful inventors cross domains rather than deepening their knowledge in a single area. As experts silo themselves further while computers master more of the skills once reserved for highly focused humans, people who think broadly and embrace diverse experiences and perspectives will increasingly thrive. No matter when you enter playing tennis, there is a path for you to enjoy playing Tennis for Life.

### **Tennis for Life Pathway**

The WPDP includes the Tennis for Life pathway and recognizes that the overwhelming majority of people playing tennis fall into the Tennis for Life stage. Having built a solid foundation in the first three stages of the framework, they progress to playing tennis or a sport of their choice for enjoyment, satisfaction or for the health benefits they obtain. Some compete, while others do not. Regardless of the pathway, or at what stage they leave the competitive stream, all participants end up in Tennis for Life, either:



#### **Competitive/Former High-Performance Participant**

The emphasis for this participant is on regular match play and practice time. Participants enjoy challenging competition and maintaining a healthy and active lifestyle to accommodate high-intensity training. Leadership opportunities within the tennis community are available and encouraged at this level.

#### **Competitive for Life**

This phase of Tennis for Life is for those who compete within the formal tennis structure. This could be at the U14, U16 or U18 level in leagues and tournaments, wheelchair tournaments and all the way to World Masters ITF Competition. It differs from Fit for Life because competitive athletes are striving to improve and to win, and they train accordingly.

#### **Fit for Life**

This phase is for those who participate simply because they get satisfaction from tennis or physical activity. They may, from time to time, compete at a recreational level, but that is not their primary purpose. Fit for Life also describes those who engage in non-sporting physical activity.

#### **Sport and Physical Activity Leaders**

This includes those individuals who contribute in ways other than being an athlete or participant in the sport or activity itself, such as coaches and instructors, officials, administrators, and those involved in sport science and medicine.

There are eight essential factors for healthy adulthood and successful aging: They describe the basic elements of the Tennis for Life stage and are the key components of being durable by design. The eight factors are interdependent and each is critical to be fit for life.

- Appropriate Physical Activity
- Cognitive Function
- Psychological Well-being
- Social Connection
- Embracing Life Transitions
- Managing Chronic Conditions
- Mindful Nutrition
- Durability by Design

### **Wheelchair Tennis**

Wheelchair tennis players also go through the 7 stages and/or the Tennis for Life Pathway. A specific document highlighting the specificity of wheelchair tennis is currently under development and will be shared once available.



Regardless of the pathway, or at what stage they leave the competitive stream, all participants end up in Tennis for Life, either:

- by being Competitive for Life, or
- by taking part, to be Fit for Life, and
- have a good experience so they want to “give back” as Sport and Physical Activity Leaders.

### **Safe Sport**

Tennis Canada is committed to protecting the security, safety, and health of everyone in our sport. Please visit the Tennis Canada Safe Sport webpage to learn more about our commitment to a positive tennis experience.

# STAGE 1

## ACTIVE START

Focus: Discovering tennis

### Stage overview

This is the beginning of a child's physical literacy journey. The focus in this stage should be on making tennis active and FUN and part of their daily routine. Supporting movement skills development will help them explore and develop locomotor, object manipulation, and balance skills on land, water, ice/snow, and in the air in a variety of movements and perceptions. This will spark their curiosity about tennis and support achieving the goal of the recommended 60 minutes of energetic activity per day.

We want to encourage play through:

- structured (adult-led) activities;
- unstructured (child-led) activities; and
- opportunities to play in natural environments.



### Culture

We want to emphasize having fun and playing together and focus on creating a culture that involves:

- **recognizing when players are having fun** and reinforcing the sentiment (e.g., Isn't this fun?!);
- **exploring** by encouraging players to try different things and ways of accomplishing simple tasks; and
- **being curious** by reinforcing curiosity when players try new things (e.g., That's a great question! or Way to go!).

### Confidence

We want to work on finding the connection to player motivation and reinforcing it by focusing on:

- **a positive attitude** by engaging in daily physical activity with positive role models, exploration, and openness to new experiences;
- **positive self-talk by encouraging players to talk themselves** up and reframing negative self-talk with positive words and actions; and
- **attention span** by helping players to remain on task and being conscious of talk time (no laps, no lines, no lectures).



## Character

We want to be deliberate in seeking positive behaviours and celebrating them through:

- **happiness** by having a generally positive attitude and outlook;
- **the effort** by giving the best effort every time; and
- **punctuality** by showing up on time and being ready to participate.

## Connection

We want to help young players learn how to connect with each other, the instructors, and the club by focusing on:

- **fun by being upbeat and enthusiastic** with body language and communication
- **self-esteem** by acknowledging when players do the right things; and
- **healthy habits and illness prevention** by explaining basic hand washing and personal hygiene.

## Competence

Tennis Canada's U-6 program teaches children 3 to 5 years of age how to play tennis while developing their psychomotor skills through adapted teaching and equipment. Activities are designed around an active environment, with the primary goal of delivering a fun introduction to tennis. The program helps develop essential physical literacy skills such as running, jumping, throwing, catching, kicking, and striking.

In this program, young players will learn to use a racquet, lightweight balls (e.g., sponge balls, balloons, inflatable balls, etc.), and targets in a fun atmosphere. The activities are individual, cooperative, and challenging.



# STAGE 2

## FUNDAMENTALS

Focus: Establishing the foundations to play and compete



### Stage overview

In this stage, the key is to establish the foundations of basic physical, psychological, tactical, and technical skills for future success. Players are introduced to the rules of the game and tennis ethics with a major focus on enjoyment and movement when playing tennis.

The development of perception skills is fundamental to long-term success in tennis. Players will use the progressive tennis approach (red, orange and green court) to play, develop, and compete with the appropriate racquet and balls, on the right size court, so they can be successful and develop the basics and an all-court game early on.

Participation should occur in a safe and inclusive environment that supports positive experiences and promotes life-long participation. During sessions, coaches should embody the **Quality Standards for Kids' and Adults Tennis**.

### Culture

We want to focus on recognizing and celebrating behaviours including:

- **using age-appropriate language** and actions with and towards others;
- **being respectful of others and the rules** through an understanding of the concept of fairness as players are introduced to competition in a fun environment, conflict resolution, accountability, challenging authority, and match play through an understanding of the rules, sportsmanship, scoring, and wins and losses; and
- **demonstrating an understanding of the right and wrong actions** and how to address and voice concerns.



## Character

We want to communicate and reinforce a character trait every day, with a focus on:

- **honesty** by telling the truth, being honest with oneself and others;
- **respect** by demonstrating respect for the club, coach, parents, officials, teammates and administrators; and
- **integrity** by doing the right thing even when no one is watching, following through on one's word, working hard to compete and be challenged by demonstrating good practice habits and commitment.

## Confidence

We want to increase the positive reinforcement expectation, with a focus on:

- **game sense/tennis intelligence** by creating an awareness of how to play the game, of the work that needs to go into training, and of how to put oneself and one's teammates in the best position to succeed, and fulfillment in working hard, competing, and being challenged;
- **ongoing positive self-talk** by making adjustments when players use unhelpful words and actions and providing support to reframe them; and
- **sport-based decision-making** by developing a sports narrative to describe what should happen, a love of competing, and respect for competitors, coaches, officials, etc.

## Connection

We want to build connections by emphasizing players' positive actions, with a focus on:

- **doing what is right;**

- **linking actions and consequences** through an understanding of the long-term effects of good and bad short-term decisions; and
- **understanding the rules** of the game and the sport and the need to have them, the concept of fairness and the meaning of fair play and the ability to demonstrate this understanding, and enjoying the learning, training and playing processes.

## Competence

### RED COURT

- **Tactical/Technical:** Has a feel for controlling the ball and cooperating with a partner.
- **Footwork:** Is developing the right habits of moving at all times, split stepping, moving and recovering.

[Click here for more details](#)

### ORANGE COURT

- **Tactical:** Is comfortable playing in all areas of the court.
- **Technical:**
  - Is developing the fundamentals of base line, transition, return of serve, serve and overhead, and volley.
  - Is developing feel, soft hands and elasticity.
- **Physical:**
  - Is acquiring basic movement skills.
  - Follows bilateral training (hands and feet).
- **Footwork:** Is learning the proper technique to run in all directions, including transition and net play.

[Click here for more details](#)



## GREEN COURT

- **Tactical:** Is becoming consistent, can manage and deliver more variation and is beginning to play percentage tennis.
- **Technical:** Has integrated the technical fundamentals (no grips issues, technical flaws or red flags).
- **Physical:** Is learning the concepts of warm-up and cool-down.
- **Footwork:** Is able to perceive and receive the ball and adjust footwork quickly. Is developing better footwork skills to enable effective movement to set up faster behind the ball with appropriate balance, stance, and recovery.

[Click here for more details](#)

- **Competition and training:** [See Appendix A](#): Recommendations for training and competition volumes.
  - Nutrition and hydration: Begin educating young athletes about the basics of nutrition and hydration, including well balanced meals and plenty of water.

- Sleep: Children should get 10 to 13 hours of sleep each night. Click [here](#) for more on the link between sleep and athletic performance in young players.
- Family support network: Focus on the fun of playing and competing and instilling a sense of fair play and respect on and off the court.
- Player health and well-being: Athletes start learning the basics of personal responsibility and independence, including being responsible for bringing their own equipment to the court and being ready to start activities on time.

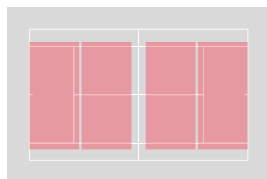
**Modified equipment:** With modified tennis balls, racquets, nets, and courts, young players are properly equipped to enjoy rallies and learn the basics of the game early on. Progressive tennis is a developmental tool that enables youngsters to train and compete on courts and with equipment that is better suited to their size, helping them improve their overall tennis skills faster for an easier transition to the full court. For teens and adults, it allows them to achieve success faster and accelerate their progression to the regular court and balls. The use of green balls can also allow older players to continue playing and still have success by slowing down the game slightly.



Tennis Canada launched a national participation program called First Set for players on red, orange and green courts to *try, learn, play, and compete*. [Click here for more information.](#)

# PROGRESSIVE STAGES

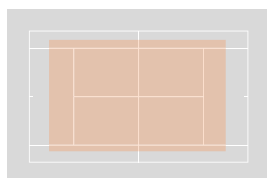
## RED COURT



**Ball:** Oversize, high-density foam (or red) ball

**Racquet:** 19" - 21"

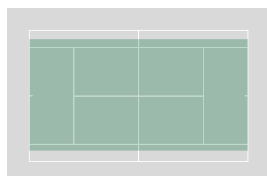
## ORANGE COURT



**Ball:** Low-compression balls (orange)

**Racquet:** 23"

## GREEN COURT



**Ball:** Low-compression balls (eg. Wilson Easy Play)

**Racquet:** 23-25"



# STAGE 3

## DEVELOPMENT

Focus: Fuelling passion and developing sound technique

### Stage overview

In this stage, players develop their technical skills and learn to make sound tactical choices as they train and compete in situations in which winning is not the ultimate goal. Players are striving to learn, improve, and fuel their passion and enjoyment on an ongoing basis. This can include bringing them to watch pro tournaments, watching tournaments on TV, looking at videos, and tracking the rankings.

A player's support group (coaches, parents, volunteers) must constantly promote a welcoming, fair, and safe environment rooted in core ethical values and sportsmanship. **At this stage, playing and competing will help athletes develop their decision-making, adaptation, problem-solving, and competitive skills.**

As players progress through this stage, some will start prioritizing tennis as their main focus while continuing to enjoy other sports and activities.

For coaches and parents, a simple periodization plan should be implemented at this stage. It is important to work on the technical aspect, including variability and individualization in training, and always ensure the exercises progress to tactical game situations. Enhanced competitions must be integrated into the daily training environment.

By the end of this stage, the player should be technically sound, with no major issues or factors limiting the individual's potential to keep improving and apply tactical strategies of the highest level. Technique is essential to be able to adapt and thrive in all tactical scenarios, including the following:

- The player understands and can apply efficient footwork to cover all areas of the court and phases of the game (all court situations), including baseline, transition, and net play, and has the ability to set up and balance as they hit. Players are initiated to move on various/different surfaces as they develop adapting and understanding of these court surfaces.
- The player can adapt by using various types of balls to maximize projection with the right intention of the play. Among the player's key tactical strategies are to establish strong footwork and sound technical abilities with all aspects of their game to help create more time to execute their shots (space and time, holding their court position as much as possible).





### Culture

We want to recognize and reinforce instances in which players meet expectations, including:

- **training habits** by ensuring they take responsibility for their actions;
- **practice and competition routines** by understanding and engaging in routines that foster successful experiences; and
- **growth mindset** by knowing that every opportunity can lead to growth through sustained work.

### Character

We want to recognize and reinforce behaviours that demonstrate good character, including:

- **self-motivation** by being autonomous enough to carry out tasks without having to be reminded and exceeding the minimum requirements;
- **work ethic** by approaching responsibilities with a focused and consistent attitude and the drive to push oneself; and
- **follow through** by building on feedback leading to deliberate follow-through actions and being true to one's word.

### Confidence

We want to support confident players through intentional instruction on the court, including:

- **emotional control** by describing one's emotional state and articulating it to others;
- **focus** by helping players identify key sport elements that require specific and focused attention (e.g., staying focused on the court and ignoring outside distractions); and
- **coachability** by helping players realize the root of errors and determine solutions themselves.

### Connection

We are actively looking for ways to connect players based on common interests, age, or level of play, including an awareness of:

- **the rules of the game** by being able to self-regulate to manage play;
- **sickness and fatigue** by balancing the need for rest and recovery with the demands of training and performance; and
- **social media** by using social media responsibly with an awareness of the long-term consequences of social media behaviours, giving constructive feedback one-and-one and publicly praising examples of success.





## Competence

**Tactical:** In this stage, there is a strong focus on consistency. The player understands tactical positioning and the best court angles in any given game situation and phase of play. The player will start grasping the concepts of change of pace, anticipation, and disguise.

At the end of this stage, the player should be able to use their technical arsenal to make sound tactical choices:

- in all phases of play (neutral, offence and defence); and
- in all game situations (both back, transitioning or at the net, when the opponent is transitioning or at the net, when serving and returning).
- **Neutral:** In addition to their preferred patterns, the player develops the ability to make the best possible tactical decisions (changing rhythm, using angles, clear intentions, exploiting strengths and weaknesses). The player:
  - builds points with heavy balls (neither straight nor moon balls) with the intention of gaining an advantage (positioning vs. angles), while maintaining consistency and the ability to hit a quality shot (avoiding mistakes in the net);
  - focuses on neutralizing the returner when serving; and
  - consistently hitting long and deep returns (position may vary) when returning.
- **Offence:** Although this is rarely rewarded at this stage, the player takes risks by playing offensive tennis (through positioning or shot) when the opportunity arises. There are four ways to take control of a point:
  - taking the ball early: Closer position to the baseline;
  - transition more quickly to the net;
  - attack with the right or dominant shot to overpower the opponent; and
  - hit unanticipated shots (e.g., drop shot, lob).
  - When serving, the player uses a variety of serves to provoke weaker shots, take control of the point, and start transitioning to an offensive game. There is a focus on variety and power on the first serve.
  - When returning a second serve, the player looks to hit aggressively from inside the baseline.
- **Defence:** The player hits high cross-court shots to gain time and make the opponent hit one more ball and anticipate the next shot to maximize recovery and movement.
- **Doubles:** The player learns the role and territory of each position (server, server's partner, returner, returner's partner) and the basic tactics.

Read more for detailed tactical benchmarks.



The player develops the technical skills to be effective in both the receiving and throwing phases.



**Technical:** The player can receive and send all types of balls. The player develops the technical skills to be effective in both the reception and projection phases to consistently hit quality shots and continues to develop their feel but in more challenging situations.

- **Groundstrokes and returns:** The player has sound reception and projection technique to be able to handle all ball controls (direction, height, speed, spin and distance) with the necessary coordination to time the ball at impact for optimal performance.
  - The increase in tempo (e.g. hitting the ball earlier) and a fluid execution prepare them to be more biomechanically efficient.
  - The decision to use a one- or two-handed backhand is made.
  - The player can hit groundstrokes on the rise at shoulder height with a long hitting zone (lengthening) when receiving rally balls from their opponent, including balls with a greater pace not to lose their position at the baseline.
- **Serve:** The player has acquired the right technique to hit all serves (flat, topspin, and slice) with the continental grip. The player takes control of the point using precision and increased power on their serve, which will instil confidence in their service game.
  - Balance, leg–arm coordination
  - Shoulder alignment, and a loose throwing arm

- **Net game:** The player must feel technically comfortable at the net with significant presence and confidence.
  - Forward unbalanced position
  - Adaptability to heights, spin, and directions
  - Net game skills (e.g., half volley and intercepted volley) are gained
- **Overhead:** The player quickly gets into a ready position using both arms, and their footwork is positioned under the ball to hit with confidence. The backhand smash is introduced.
- **Footwork:** The entire basic footwork movement chain (shuffle, crossover, sprint, backward, run around backhand) is understood and applied during competition.
  - The player develops the ability to use effective footwork (small vs. big steps, hit on the run, adjustment to various shots) based on the distance to maximize their movement to the ball and to efficiently get back into position before the opponent's next shot.

# MOVEMENT

**Physical:** The goal of this stage is to improve the player's mastery of basic motor skills and ability to combine them effectively. The player also becomes familiar with the different types of physical training. For young players, this period marks the transition from childhood to adolescence and the beginning of a growth period.

- Basic motor skills: Master running–jumping–throwing skills and combine them with footwork quality and dexterity.
- Warm-up: According to simple principles and experiment with different types of training to improve technical skills.
- Adaptability: Stimulate adaptability and creativity in varied physical situations and develop the player's autonomy through actively participating in their training and understanding their actions.
- **Competition and training:** The training and competition volumes will vary based on the player's development profile and the periodization phases of their annual training plan. The four types of player pathways to the Top 100 can be used to understand recommended training and competition volume.
  - The player must adopt a healthy and balanced athlete lifestyle focused on nutrition and hydration, sleep, recovery, adaptation to travel, family support, health and well-being, and the healthy use of social media.
  - Nutrition: Provide education on nutrition (daily and while competing), including key nutrients and food sources for health and performance. Introduce the basics of grocery shopping and label reading to help support proper food choices. Introduce basic hydration concepts for health and performance, including hydration needs when training. Start to understand the importance of appropriate fluid choices (sports drinks vs. water, pop and energy drinks, etc.). The player starts to learn to make positive choices at restaurants and other dining situations.

[Refer to Canada's food guide](#)  
[Guide to Understanding Food Labels in Canada](#)



**Recovery:** Introduce the concept of post-training and competition recovery nutrition. Focus on the timing of meals and snacks around training and competition and the goals for the nutrient composition of every meal and snack. Provide examples of high-quality food choices for the recovery.

- Introduce the benefits of hot and cold showers, contrast therapy, and cool-down routines after workouts.
- **Sleep:** Encourage players to get the recommended 9 to 11 hours of sleep every night.
- **Travel and jet lag:** Begin to understand how to manage travel, including packing and adapting to time zone changes and different foods and cultures
- **Family support network:** Stress the importance of education and a healthy balance between school, tennis, friends, and other activities. Continue participating in a range of activities and sports, free play, and time with friends.
- **Player health and well-being:** Continue to build the player's level of responsibility pre- and post-training and during competition, including equipment checks, booking practice sessions, and proper nutrition and hydration.
- **Social media:** Educate the player about the proper use of social media, the amount of time spent on social media, and the responsibilities associated with electronic communication.
- Have conversations about mental health and the feelings of anxiety, stress, and pressure the player may feel. Let them know there are people and places who will listen and help: Add link.
- Educate the player about appropriate and safe conduct by individuals in positions of authority, including coaches and other adults. Teach the player how to manage a situation in which they feel uncomfortable.



**Equipment and court:** The player should prioritize any equipment that will prevent injury. A neutral racquet of up to 300 g is recommended (285 g at the end of the stage). As far as racquet length and weight, a full-size racquet is only recommended for children over the age of nine. The player should prioritize a multifilament string to develop their feeling, and the tension should not exceed 23 kg. Professional monofilament strings are not advised at this stage, though hybrid compositions may be used towards the end of this stage. The player must play on a full court, with a regular ball. The player will begin to pay more attention to their personal preferences and needs based on their level and style of play. The player must bring two racquets to the court. In this stage, young players will likely be transitioning from a junior aluminum frame to a junior graphite frame. Many top racquet manufacturers offer lighter and shorter versions of their full-size (27-inch) frames. Depending on the player's height and strength, they may use a 25-inch junior frame or a 26-inch junior frame. Some (players 10 to 12 years old) may even be ready to use an ultra-light 27-inch frame. The grip size is normally 4  $\frac{1}{4}$  or 4  $\frac{3}{8}$  at this age group depending on the size of the kids hands. With regards to weight and balance, most manufacturers follow the industry standard of a generally even balance and an unstrung weight of 230 to 270 grams (8.1 to 9.5 oz). A player enrolled in a high-performance program and tournaments should have two identical racquets strung with the same strings.

- Determining what length is best:
  - Have the player hold the racquet at the base of the grip while holding their arms straight down beside them.
  - If the racquet touches the ground, it is too long. Ultra-light 27-inch frames usually come unstrung, while most junior 25-inch and 26-inch frames come pre-strung.

- Multifilament string strung no higher than 50 lbs. (23 kg) is recommended.
- A thinner gauge (1.18 to 1.25 mm) is recommended, but if a player is breaking the strings after 10 to 15 hours of play, a 1.30 mm gauge multifilament may be a better option in terms of durability.



- Multifilament strings include:
  - Head Velocity MLT
  - Wilson Sensation, Sensation Plus, NXT
  - Babolat Xcel
  - Dunlop Silk Pro, Iconic All
  - Tecnifibre X-One Biphase, NRG<sup>2</sup>
  - Yonex Rexis (Feel/Speed/Comfort)

# STAGE 4

## CONSOLIDATION

Focus: Emphasizing tactics and focusing on specific tasks



### Stage overview

This period may require more adaptation for some than others, as for the teenage players, they may be going through puberty—an important phase in adolescence during which individuals change and grow at different speeds and in different directions.

In this stage, it is important to reinforce the technical skills acquired earlier, as it becomes more difficult to start making major technical adjustments. A higher degree of engagement and concentration is required and expected, as the demands and specific tasks become more complex. The player will learn to travel abroad for longer periods, developing their autonomy and focusing on their own tactical game style to build solid patterns in keeping with their personality and skills. In matches, the player will begin to impose their game style.

It is therefore essential to reinforce the values of competition and good conduct on and off the court.

As the player increasingly focuses on tactics, **they become fully engaged in their tennis development (i.e., transitioning from national to international events).** The player gains a better understanding of the performance requirements of their game.

In doing so, the player also learns to find tactical solutions by competing in matches of increasing quality on a range of surfaces and against opponents of different styles and ages. The player further develops their competitive mindset and strength and focuses on competing and being a well-rounded athlete (holistic approach).

As the player travels and competes, the priority remains their overall development. As results become increasingly important, the player must continue to focus on specific objectives in competition.

The player's long-term development is emphasized over their short-term results. It is important to ensure the young player has competed in a sufficient number of official quality matches (\*) and practice matches to boost their tactical development. Playing in small areas (e.g., 2x1) or in a specific court zone with an adequate work and rest time ratio can be very beneficial at this stage, since these exercises simulate game situations in a restricted area, helping to develop competitive, decision-making, and problem-solving skills. Enhanced competitions must be integrated into the daily training environment.



For coaches and parents, the periodization plan is more detailed and specific based on the player's age, number of matches with a 3:1 win-loss ratio, ranking, surfaces, and development opportunities. The coach takes on a more important role as their leadership in the overall planning of the player's budding career expands.

The player is introduced to sport science, specifically physical preparation and psychological routines. Towards the end of this stage or very early in the next stage, the player and their parent(s) will focus mainly on tennis. The top priorities are training and competition.

*\* A match in which the player who is losing wins more than 50% of the games is commonly considered a quality match.*



## Culture

We want to establish clear expectations with an emphasis on remaining courteous in victory and defeat. The focus should be on:

- **selflessness** by putting others' wants and needs first and living with gratitude;
- **respect for adults** (parents, coaches, officials, administrators and members of the club and the broader community); and

- **the willingness** to follow by being fully committed to the project and process. It is impossible to lead effectively without being willing to follow effectively. The player must be aware they are representing Canada at international events and behave accordingly.

## Character

We want to focus on the player's internal and external development plans, which extend beyond the court. In this stage, the emphasis must be on the process and not the outcome:

- **cultivating a strong sense of focus** on achieving every goal as it comes and mastering the skills needed to achieve them (e.g., bringing equipment to practice);
- **dealing with setbacks** and having the drive to continue to move forward regardless of what comes their way; and
- **being open to criticism** as part of the process of being coachable. Constructive feedback isn't negative feedback!

Reinforcing the values of competition and good education on and off the court is essential.



## Confidence

We want to continue elevating players through self-worth including:

- **self-esteem** to replace negative thoughts with positive self-talk;
- **meaning** through an understanding of the development path they are on, the next steps, and the why and the ability to articulate the plan to others; and
- **membership** through the feeling of being accepted by teammates, coaches, and the broader club.

## Connection

We want to continue to make players feel part of the process and club with a focus on:

- **relationships with others** by supporting and encouraging to build mutual trust;
- **conflict resolution** by making the effort to listen to others while trying to understand different points of view; and
- **empathy** as the key to solving bullying issues and the ability to understand incidents from one's own perspective and those of others.



# CONFIDENCE

## Competence

**Tactical:** A player must problem-solve and find tactical responses in practice and competition. The player starts to travel more, and the impact of different surfaces becomes more obvious. At this stage, power and development differences have a significant incidence on the outcome of matches. The player must develop/improve through game situations and matches. The player's personality will begin to emerge (personalized game style), revealing the most effective ways for them to win points.

- **Neutral:** The player is getting better at implementing high-quality patterns. Their increasingly powerful upper and lower body enables them to better open the court and change the pace more and more efficiently.
  - The player looks at building the point crosscourt progressively using controlled aggression.
  - The notion of margins between consistency and quality is critical at this stage (e.g. how much risk should I take). In accordance with the results we are targeting, the efficiency of the footwork has a tremendous influence in creating that margin of a good-quality shot.
  - Mastering spin and the ability to neutralize on the second serve.
  - Serving to the body and high backhand target on the second serve.
  - Long and deep returns are still the basic pattern while the returner's position varies.



Self-esteem: To replace negative thoughts with positive self-talk.

- **Offence:** As the player learns to harness their power, their offensive shots are increasingly rewarded. The player must resist the natural tendency to go for too much and learn to wait for the right ball to hit a decisive shot. The player has more options in their game, and shot selection based on positioning becomes more important.
  - Learn to attack with the intention of finishing the point and starts to rely on the change of pace to suddenly take away time from their opponent.
  - The first serve starts to constitute a weapon on fast surfaces;
    - the first serve is hit with intention while maintaining a high percentage; and
    - the wide first serve is used to set up the next shot.
  - Develop a tactical intent to take the lead of the point on a second-serve return.
- **Defence:** The player must resist the tendency to hit a low-percentage shot too quickly. Work on making the opponent play one more shot, defend crosscourt, and stay in the point.
- **Doubles:** The player learns the positioning on an offensive to-the-net type of doubles play and the first four keys are:
  - score a high first-serve percentage;
  - take a maximum of returns in and to the feet on the opponent's serve and volley;
  - play right between the opponents as much as possible when there are no clear openings; and
  - learn to finish points at the net by putting away volleys with power or precision (cross, line, middle) depending on the opponents' positions.

- **Technical:** The technical skills must effectively support the tactical priorities. The player will involve their entire body in the proper chain of movement. The weight transfer will be greater, and ground force will be a key focus to maximize the movement, including recovery.
- Groundstrokes and returns: The player consistently rely on their ability to hit the ball on the rise.
  - All perception and technical reception skills associated with this ability must be in place.
  - Acquisition of a technique to hit a clean ball with minimal effort through the increased use of the ground and rotational force with great timing.
  - Use of an open stance and weight transfer through the ball.
  - Greater emphasis on setup and timing skills becomes important as ball tempo and court coverage demand increase.
  - A full repertoire of adaptation skills to counterattack and defend is required.
  - Vary all types of serve and adjust the technical requirements accordingly. A player is able to have a great variation of serves ranging from a first to a second serves.





- Serve: Develop a more powerful serve by increasing the use of the ground force (vertical jump), rotational force, and arm speed. The differences between the first and second serves are less significant.
- Net game: It is essential to adjust their technical abilities according to the ball received (developing a quicker hand, making greater use of the legs, closing in on easy balls). The physical aspect is important to keep a good balance in difficult situations. The player should master the swing volley.
- Baseline: In rallies, boys/men generally hit heavier balls with a higher ball trajectory than girls/women, except when attacking from inside the court where they can also hit through the court.
- Overhead: The player uses the proper upper and lower body technique and is able to finish the point with power and precision. The player is also able to adapt their technique based on their position on the court and their tactical intention. It is important to focus on the backhand smash at this stage.
- Footwork: The full range of footwork should be well acquired by the end of this stage.





**Physical:** Physical competence: The main objective is to achieve the ongoing improvement of basic motor skills and the ability to combine them in a more complex setting. It is the trainer's responsibility to apply the main principles of physical training. The player will often experience significant growth spurts.

1. **Perfect basic motor skills and combine them in tennis situations.**
  2. **Warm-up based on the main theme of the session.**
  3. **Be efficient in different physical situations, stimulate creativity, and foster a positive approach to competition.**
  4. **Learn in a fun environment and through a positive approach to competition.**
- **Training and competition:** Although the focus of the stage is on developing the player's technical abilities, the player should also commit to an adequate training volume and participate in quality stage-appropriate competitions. Based on the player development pathways to the Top 100 and the four player profiles and development pathways, the recommended training and competition volumes are referenced in Appendix A: Recommendations for training and competition volumes by player profile.
  - **Nutrition and hydration:** Encourage athletes to practice proper nutrition and hydration before and after training and competition. The player should develop the ability and confidence to read food labels while grocery shopping at home and on the road and learn to manage nutrition and hydration while travelling and in different environmental conditions. Refer to the [resources developed by the Canadian Academy of Sports Nutrition](#).
    - Begin to develop individual hydration plans that are trialed and adjusted based on training, competition schedule, and environmental conditions. Teach the player the signs and symptoms of poor hydration.
  - **Recovery and injury prevention:** Ensure the player has sufficient time to recover between training sessions or before the next competition and gets enough quality sleep (in addition to other forms of recovery to support skills development, learning, and retention).
  - **Sleep:** The recommendation is to get 8 to 10 hours of sleep every night.

- **Independence:** The player must continue to develop their independence, organizational skills, time management, and accountability, which will greatly benefit them as they navigate the complexities of balancing school, part-time employment, leisure activities, relationships, and tennis. The mental aptitudes developed through sport also support life skills.
- **Family support network:** Young athletes need strong support from family and friends and assistance in finding a balance between school, tennis, friends, and part-time employment.
- **Player health and well-being:** Continue reinforcing the need to respect coaches, opponents, officials, and tournament organizers during competitions, on and off the court. Start a conversation about doping and doping control and the importance of understanding players' rights and obligations.
- **Safe sport:** Continue educating the player about safe and inclusive environments in which they can train and compete without fear of bullying, harassment, or abuse. Tennis Canada is committed to protecting the security, safety, and health of its young people, vulnerable persons, staff, and volunteers. Go to the [Tennis Canada Safe Sport webpage](#) to learn more.
- **Mental health:** Create open spaces for conversations about the stress and anxiety that can come with competition and the ways to balance tennis with school, friends, and family. [The Canadian Centre for Mental Health and Sport is a good resource.](#)
- **Travel and jet lag:** Athletes learn how to best manage jet lag and time zone changes, including the number of days required to counteract time changes and how to manage travel days. [The Canadian Academy of Sports Nutrition](#) is a good resource
- **Equipment and court:** At this stage, most if not all players are using a 27-inch graphite frame. The recommended weight range for frames is 270 to 285 g unstrung. Most racquet manufacturers produce light and

team versions of their graphite frames, which are ideal for players at this stage. As in stage 3, two frames are recommended for players enrolled in high-performance programs and who take part in tournaments and other competitive play (i.e., leagues) on a regular basis. The multifilament string will fray over time and eventually break. If the player begins to break multifilament strings quickly (within 10 to 15 hours of play), a higher gauge or hybrid strings are the next step in the string setup.

- A hybrid string bed is composed of two different strings, usually a softer string (i.e., nylon or natural gut) and a stiffer one (i.e., monofilament). Some players prefer stiffer string on the mains (up and down the frame), and a multifilament on the crosses (across the frame). A player may also have the softer string in the mains and the stiffer one in the crosses. The main string is the dominant one in the string bed and thus provides the most feedback to the player and has the most influence on the ball. As with racquets, the choice of string setup comes down to preference, so it is recommended that players try both options and choose the one they prefer.
- At this stage, players are encouraged to continue stringing their racquets at a tension no higher than 24 kg. Regardless of where they decide to string the softer string, it should be strung 1 to 2 kg higher than the stiffer string. As far as gauge, the monofilament should be 1.10 to 1.20 mm, and the softer string should be 1.25 to 1.35 mm.

# STAGE 5

## PERFORMANCE

Focus: Training with intensity and emphasizing physical development

### Stage overview

At the start of this stage, as the player makes the decision to pursue a career in or continue seriously with high-performance tennis, they must respond to increasing demands in terms of the intensity and quality of their preparation and performance. Physicality, athleticism, and fitness are key for the future.

**The player elevates their game from good to great, developing their game style (personalization) and meeting and exceeding international standards.**

The coach takes on a greater role with increased leadership in the player's overall career development and must collaborate with an integrated support team. All aspects of preparation are now more individualized and focus on consistent quality and efficiency in the player's performances in training and competition. By entering this stage, the player has already proven they possess the necessary skills and profile. Physical development becomes a priority to bring this potential to the next level, take on the workload and the increasing pace of the game, and prepare for future requirements. The player will face additional pressure in terms of situations and their outcomes and expectations. Sports medicine and sports science play a more significant role.



With the teenage players, parents must place greater trust in the experts than they did when their child was younger. For coaches and parents, a clear periodization for optimal development and performance is established based on the player's objectives and game style. Still, the plan must be flexible enough to be adapted to various intangibles that may affect the player's performance (e.g., ranking, health, fatigue, performance momentum).

It becomes more important to work with practice partners on tactical aspects, although the player must also be able to practice with players of lower caliber and stay focused on their personal objectives. Ideally, in this stage, the player is up to date in their academic progress and can make the decision to play professionally or go to college in the next stage.

The participant has made a conscious decision to pursue a potential career as a professional player.



### Culture

We want establish a holistic development plan that leverages all skills for the player and coach, with a focus on:

- **accountability** by setting a standard of reciprocating values;
- **respect for the game** and tennis' key customs and traditions; and
- **leadership** by modelling behaviours that show pride and inspire others. The player is comfortable displaying their own leadership style and representing their country while training and competing.

### Character

We want the player to develop their inner strength, commitment, and perspective that competing is about the process, not the outcome. They see setbacks as learning opportunities and realize their life is not their score on any given day. The focus should be on:

- **internal drive to succeed** regardless of what sparks it (e.g., big crowds, admission to college, professional tennis, etc.);
- **humility**, since a humble athlete neither underestimates nor overestimates their ability or their opponent; and
- **stress management** to compartmentalize worries and focus on the task at hand.

### Confidence

We want the player to believe they can compete at this level while acknowledging that their development is ongoing, with a focus on:

- **self-belief** and knowing one can achieve anything they set their mind to;
- **resilience** to see mistakes and failures as opportunities (winning or learning); and
- **performance under pressure** by embracing challenges and thriving in key high-pressure moments.

### Connection

We want the player to develop a strong and supportive network of positive relationships that keep them grounded, with a focus on:

- **relationships** by understanding the boundaries between personal and sport relationships and developing a strategy to address inappropriate actions by coaches and others;
- **media relations** by explaining how to manage relationships with media, key messages and mock interviews; and
- **awareness and acceptance of diversity** by developing an awareness of strategies to embrace diversity and learning about a host's culture, laws, and attitudes.





## Competence

**Tactical:** At this stage, the player must keep establishing their strength and better define their patterns. The player learns that despite the increase of tempo, tactical control must be maintained. Finding ways to impose their own game, creating as much pressure as possible and mitigating the risks taken becomes important. The player starts winning matches on their first serve (and Serve+1).

- **Neutral:** The player is increasingly relying on percentage tennis and must therefore keep building points with trajectories, pushing back the opponent, and moving the opponent while getting into the best possible position to win points.
  - The transitions between the three phases of play (attack, neutral, defence) in the same point are increasing and require specific focus.
  - On the second serve, the intention to neutralize the return through the serve or through the shot after (+1).
  - The long and deep return remains the preferred option, but the returner's position varies on the second serve returns for efficiency. The player starts to be able to open the point from very close to the service line or far behind the baseline. The Return +1 pattern is now being implemented on a regular basis.
- **Offence:** The player must take every opportunity to attack.
  - The player mainly attacks down the line or inside out when coming to the net to cover the court properly. Approaching the opponent's known weakness is also an option.

- At the net, the player covers the down-the-line passing shot and forces their opponent to lob or try a low percentage passing.
- The serve comes to maturity and is a weapon. In this stage, the combo serve +1 and serve +2 will make the player more dominant.
- The first serve has variations with the intention to generate power.
- The combo serve +1 is mostly used in the open court.
- Defence: The player always slices with purpose.
  - Defending crosscourt is still preferred, and the player should mainly choose to pass the opponent in two shots (not one).
- Doubles: The player's tactical choices are more automatic, especially when poaching. The start of every point (when serving and returning) is planned with the partner to coordinate teamwork.



**Technical:** The player will have acquired all the technical skills required to become a contender. As the tempo of the game and the effectiveness of their shots becomes more important, the coach and player may want to work on mastering a specific technical aspect. There are constant technical adjustments in all areas throughout the season, and the player must adapt to various conditions. The strokes are constantly moving technically and therefore need constant monitoring if the evolution is a deterioration.

**Physical:** The main objective in terms of physical development is focused on improving the player's physical aptitudes. It is important to make training more intensive. The coach plans the season based on alternating periods of training, competition, and rest. The use of monitoring tools is recommended to track daily training loads and wellness parameters such as sleep, hydration, stress, fatigue, and motivation to train.

- Provide a solid base to develop strength, endurance, and speed and constantly associate coordination.
- Combine basic skills in the context of strength, speed, and repetition of effort.
- Support decision-making under pressure.
- Individualize training based on the player's profile.

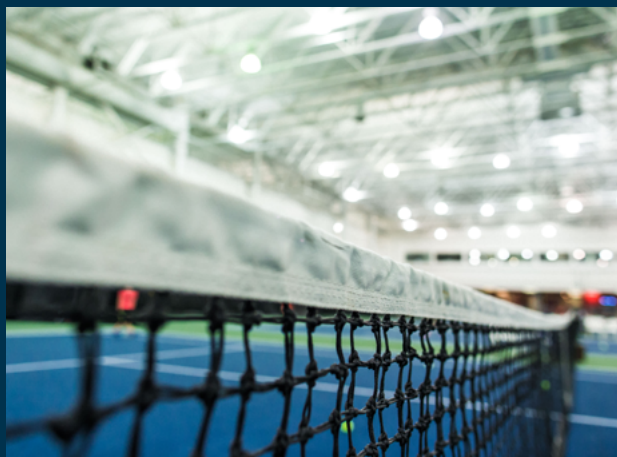
- A continued focus on fitness training will help build muscle. For young women, continued improvement in muscle power and the ability to repeat intense efforts are fundamental. Two periods aimed at developing physical aptitudes (4 to 6 weeks) with a priority on physical training are recommended.
- Be efficient in various physical situations, stimulate creativity, and search for solutions in challenging situations and when stakes are high. The player continues to develop greater autonomy and invest in their physical development.
- Training and competition: Although the focus is on physical development, the player should commit to an appropriate training volume and participate in quality competitions. Based on the player development pathways to the Top 100 and the four player profiles and development pathways, the recommended training and competition volumes are referenced in Appendix A: Recommendations for training and competition volumes by player profile.



- **Nutrition and hydration:** Provide education on the nutritional demands of altitude training. The Gatorade Sports Science Institute created a [reference page](#). With support, the player develops shopping and nutrition strategies when abroad and when competing in high-level tournaments. The American College of Sports Medicine also created a [reference page](#).
- **Recovery:** Support the player as they develop an individual recovery plan that has been trialed and is well tolerated. Ensure the player can adjust their recovery needs based on their training volume, intensity and schedule. The USTA published a [guide to tennis recovery](#).
- **Sleep:** The link between extended sleep times and improved athletic performance is strong, and some experts suggest adult athletes get 9 to 10 hours of sleep per night instead of the 7 to 9 hours recommended for the general population. The player develops sleep strategies for competition and travel, including specific jet lag rest, sleep and nap patterns, light and dark exposure, meal and snack patterns and other strategies (melatonin). The NCAA Sports Science Institute produced a [sleep and wellness resource](#).
- **Independence:** The player continues implementing skills.
- **Family support network:** Emotional and financial support and resources are critical to create a positive and competitive high-performance environment. The focus continues to be on effort rather than results.
- **Mental health:** It is important to continue to reinforce open dialogue and a supportive network related to mental health. Develop

individual mental health strategies including breathing exercises, time away from tennis, meditation, and music.

- **Travel/jet lag:** Further refine travel and jet lag strategies to maximize the ability to perform when travelling internationally.
- **Player health and well-being:** Teach the player about doping procedures (ITF, WTA, ATP). The [Canadian Centre for Ethics in Sport](#) is a good resource. When appropriate, provide information on the impact of [alcohol and drug use on recovery](#).
- **Social media:** Help the player understand the pros, cons, and responsibilities that come with the use of social media.
- **Academics and time management:** Managing school, tennis, and other life activities can be challenging. Ensure the player understands [basic time management skills](#).
- **Media training:** Teach the player basic media training.
- **Financial management:** Build on basic financial management skills. Scotiabank created a [reference for professional athletes](#).







**Equipment and court:** Encourage the player to be open-minded about trying new equipment (racquet, string tension, etc.).

- A tennis racquet has a length limit of 29 inches. Most racquets measure 27 to 27.5 inches. The more common head sizes are between 95 and 100 sq. inches.
- There are two common string patterns. A dense 18x20 string pattern will offer more control, while a more open 16x19 string pattern will provide more power. With so much variety, the player should be able to find a set up that works well for them. Most players will have 2 to 5 frames on rotation.
- Racquet matching and customizing may be something to explore for a player who is sensitive to the differences between each frame. Finding a reputable pro shop and consulting experienced racquet technicians will help the player with any questions they may have regarding their equipment. Some play with heavier frames ranging from 285 to 315 g unstrung. A player's choice of racquet comes down to what they feel the most confident playing with, so it is important to try out different types of frames before making a purchase.
- At this stage, strings and tension vary more than ever. Some may choose to continue using a monofilament and nylon hybrid, while others will begin using a full bed of monofilament strings (one type of monofilament or a monofilament hybrid using two different monofilaments). String gauges vary between 1.20 and 1.30 mm. Although some players may want to string at higher tensions (27kg+), monofilament should be strung anywhere between 18 and 25 kg. As a player starts to use monofilament strings, they should first try options containing additives that give them a softer feel. For example:
  - Luxilon: Smart, Element
  - Head: Lynx Touch, Hawk Touch
  - Yonex: Poly Tour Pro
  - Babolat: RPM Team
- By the end of this stage, in collaboration with an expert, the player will start using technology to customize their racquet (e.g., grip, swing weight, balance, etc.) to ensure all their racquets are identical and maximize their performance.



# STAGE 6

## TRANSITION TO PRO TENNIS

Focus: Striving for precise execution and mental performance



# INTERNATIONAL COMPETITIONS

### Stage overview

This stage is characterized by a complex and harmonious combination of performance factors that will contribute to the player's ability to transition to the professional level. The player truly strives for success.

The keys to this critical stage are the individualization of practices and schedules, precision in execution and mental performance.

This stage demands a real focus on the process, though the outcome is more significant. The player's overall game is well established but specific improvements and adaptations are required as the player faces more mature and experienced opponents. The results may not be consistent but should demonstrate the player's potential to keep progressing.

Doubles play is important to maximize matches and ensure the player becomes more familiar with older opponents. The player has a greater say in the overall planning as they begin to take charge of their choices and career.

Although the player will get a taste of the professional tennis tour and may be part of more glamorous activities at nicer venues, there is still a long way to becoming a professional tennis player. Agents and sponsors will exert influence, and the player must remain focused on their personal needs regarding their periodization plan. There is still room for improvement in specific areas to help the player climb in the ranking and progress to the next level. In competition, the right attitude is essential since prize money and expectations have a greater impact on the outcome.

The WPDP is not a static process. Like tennis, it is constantly evolving to support player development.



### Culture

We want to create a genuine interest and drive to consider all aspects of performance and experiment to unlock the keys to the player's success with a focus on:

- **profit** to understand the financial impacts and benefits of a clear purpose, process, quality product, and the right people on the player's personal brand;
- **transfer** to ensure tennis learnings support the player's personal and professional success outside the sport; and
- **mentorship** to teach the next generation to respect the game, support their communities, and pass the torch as a representative of Canada.

### Character

We want the player to live by their values by focusing on:

- **competitive instinct** and the courage to make tough, spur-of-the-moment decisions that often mean the difference between winning and losing;
- **persistence** and the ability to face repeated adversity and exhibit a conviction to keep showing up with a fighting spirit day after day; and
- **accountability** through personal responsibility and ownership of one's career by acknowledging and taking on the ranging physical, mental, emotional, logistical, and financial demands of the professional tour.

### Confidence

We want the player to trust in the path they are on and believe they are good enough now and will be better in the future. The focus is on:

- **mental readiness:** knowledge and coping skills to manage the on- and off-court demands of transitioning to professional tennis. This is much broader than being able to handle pre-match jitters. It is the mental readiness for travelling, loneliness, the ups and downs of competition, financial challenges, and more;
- **trust in the process** by being fully committed to training with the belief that following the path will lead to success over time. In tennis, the transition (i.e., to the upper levels of the tour) often takes years, and the player must understand that trusting the process is not a short-term exercise; and
- **financial literacy development** to gain an understanding and appreciation of the financial requirements of a professional career, as well as ways to budget, generate alternative forms of income, and find sponsorship opportunities.

### Connection

We want coaches to support the time away and commitment required to compete and have real and deep compassion for the player: Person first, player second. The focus is on:

- planning and preparation through multiyear planning to achieve sporting and career goals (track, record, report, revise);
- social connectedness by maintaining ties and developing a support network amidst the challenges of transitioning to professional tennis; and
- mentorship by seeking valuable information, resources, and support from peers and other mentors. The ability to gain mentorship and information during this transition phase is essential.



## Competence

**Tactical and technical:** At this stage, as in stage 5, the player has acquired the technical skills to be a contender. The coach and player may want to master or reinforce certain technical aspects as players/opponents know each other's strengths and weaknesses when going head-to-head. Technical adjustments may also be required if physical pain is reoccurring in a specific part of the body. There are constant technical adjustments in all areas throughout the season, and the player must adapt to various conditions. The strokes are constantly moving technically and therefore need constant monitoring if the evolution is a deterioration. All the tactical learnings the player has acquired in previous stages are repeated and deepened with greater accuracy with a view to becoming more efficient.

- **Neutral:** The shot quality in rallies has the right balance between aggressiveness and consistency.
  - The player can hit the ball to any part of the court from almost anywhere.
  - The transitions between the three game phases (attack, neutral, defence) are very frequent in the same point.
  - On the second serve, the speed and quality of the target are important with a focus on precision and ball movement (for example, the spin-speed is the ball going out of the court and stretching the opponent enough and the ability to build or counterpunch on the second shot after the serve will make a difference).
  - The player aims for over 50% of points won on their second serve.


- Long and deep returns remain the preferred option, and the player's returning position varies. The ability to be effective from extreme positions on the return is important.
- **Offence:** The player capitalizes on opportunities—the only way to win at the highest level.
  - **On the first serve:** Speed, accuracy, first-serve percentage, and quality of the Serve +1 are making a difference.
  - The player aims for a minimum of 65% of first serves in play and to win approximately 80% of first-serve points.
- **Defence:** Players are mastering the art of counterpunching.
- **Doubles:** To develop proficiency as a team when serving and returning, a player will seek a stable partner. The player continues to develop their automatic tactical choices.

**Physical:** The main objective is physical development focused on improving physical aptitudes to achieve a high level of performance. The intensification of the training takes on more importance with individualized sessions based on game profile. The coach plans to prepare the player's professional career. The first step is to alternate between periods of development, competition, and rest.

- Develop tennis-specific skills through strength, speed, and repetition of effort. Muscle strengthening is focused on the body, but sessions must target the lower limbs, torso, and upper limbs. Endurance must be developed through a range of activities, especially the repetition of high-intensity efforts integrating specific efforts on the tennis court.

- Individualize training based on the player's profile. The physical aptitudes must be expressed in competition, allowing for a complete playing style. The development of power, explosiveness, strength, endurance, and speed must continue during competition. Be efficient in various physical situations, stimulate creativity, and seek solutions in emotionally challenging situations: The player continues to develop greater autonomy and invest in their physical development.
- Be efficient in various physical situations, stimulate creativity, and seek solutions in emotionally challenging situations: The player continues to develop greater autonomy and invest in their physical development.
- **Training and competition:** Recommendations for training and competition volumes by player profile.
  - Nutrition: ensure the player has adopted periodized nutrition plans based on the annual training plan and make sports nutrition support available to assist with food record testing and monitoring, dietary patterns, and energy balance throughout the year. The player should feel confident monitoring hydration and have a well-tested hydration plan for training and competition that may easily be adjusted to ensure optimal performance.
  - Recovery: The player has a well-tested nutrition and physical recovery plan that can easily be adjusted based on the demands of travel, training, and competition.
  - Sleep: Sleep management is well-developed and a high priority, especially regarding jet lag and international competition.
  - Independence: The player relies on a self-directed approach or works with a sports management agency on certain aspects of the plan.
  - Family support network: Emotional and financial support and resources continue to be important to create a positive, holistic, and competitive high-performance environment.
  - Mental health: Continue to reinforce open dialogue and a supportive network for good mental health and develop individual mental health strategies, including breathing exercises, time away from tennis, meditation, and music.
  - Travel and jet lag: A well-developed plan should be in place.
  - Player health and well-being: Ensure the player is aware of doping control procedures, including in and out of competition testing. The player must comply with all ITF/WTA/ATP anti-doping requirements and understand their rights as an athlete. It is important to continue to find a balance between tennis, family, friends, and school and plan for non-tennis activities, like sightseeing, when abroad. Use Game Plan resources for support with education, post-tennis career, and the transition after retirement.
  - Safe sport: Ensure a good understanding of appropriate and safe behaviours
  - Academics and time management: Focusing on studying on the road and keeping up with your education to maximize free time.
  - Brand management: Assist the player in building their brand through solid media training and sponsorships.



- 
- **Equipment and court:** The player will most likely be using the same or a similar racquet as in stage 5. Slight modifications to the frame may be made in consultation with a trusted racquet technician.
  - The player should be aware of their preferences in terms of equipment. They will be breaking strings regularly, and purchasing reels is a great option to save money and ensure they have enough string for all their frames.

# STAGE 7

## LIFE AS A PRO

Focus: Delivering high performance and achieving life balance (Grand Slams, Olympics, ITF/WTAT/ATP, Billie Jean King Cup/Davis Cup)

### Stage overview

At this stage, all aspects of the player's life are centred on professionalism in matches and court activities, including all aspects of their preparation. Each member of the team that supports the player has specific expertise and role to maximize the player's performance, health, and well-being.

At this stage, the margins are very small between players and therefore the difference between wins and losses is very small. The player is consistent in their results and able to find solutions to win matches even in adverse circumstances. Their focus is on winning tournaments and building their own success and history. Their presence on the tour is established, and they are comfortable in their professional environment. They adapt faster from one tournament to the next. There is consistency in their team, and the business aspect is well organized without being a distraction. Their sports medicine and sports science support, including data analytics, is very structured and efficient.



Life activities (e.g., partners, children, financial distractions, aging parents, etc.) are important factors in this stage. The player's periodization plan is based on winning key competitions (Grand Slams, Olympics, Billie Jean King Cup/Davis Cup, etc.).

The practice and competition volume is reduced compared to previous stages, as the player aims to extend their career. Regeneration is critical.

It becomes more challenging to reach the next level or simply maintain an edge over fierce competitors. The player has an opportunity to be a tennis ambassador by giving back and taking a leading role for the next generation of players.

The player should keep close ties with their national federation and continue to give of their time to motivate younger generations whenever possible.



### Culture

We want to create a genuine interest and drive to consider all aspects of performance and experiment to unlock the keys to the player's success with a focus on:

- **profit** to understand the financial impacts and benefits of a clear purpose, process, quality product, and the right people on the player's personal brand;
- **transfer** to ensure tennis learnings support the player's personal and professional success outside the sport; and
- **mentorship** to teach the next generation to respect the game, support their communities, and pass the torch as a representative of Canada.

### Character

We want the player to live by their values by focusing on:

- **persistence** and the ability to face repeated adversity and exhibit a conviction to keep showing up with a fighting spirit day after day;
- **ambassadorship** by being a positive ambassador for the sport able to balance ego and humility, make appearances, go above and beyond for others, and give back;
- **their personal and professional brand** by achieving and maintaining a positive professional image on and off the court that aligns with the responsibility of being a role model.

### Confidence

We want the player to trust in the path they are on and believe they are good enough now and will be better in the future. The focus is on:

- **levelling up** and finding ways to make marginal gains, focusing on the details that can make a small but significant difference;
- **creating a reflective practice** by using performance as data and reflecting to understand the adaptations that can be made and their potential impact; and
- **trusting in the process** by focusing on the things within the player's control and knowing they can influence outcome.

### Connection

We want coaches to support the time away and commitment required to compete and have real and deep compassion for the player: Person first, player second. The focus is on:

- **social connectedness** by maintaining ties to social support networks despite the nomadic lifestyle to achieve career goals;
- **community impact** by being a role model and giving back to the community that provided the player with opportunities to reach the professional level; and
- **personal and professional balance** by finding outlets outside tennis for the player's mental and physical renewal and maintaining sound personal connections and professional relationships in the process (e.g., new practice or doubles partner or coach).



# PASSION



Have the ability to face adversity and demonstrate the conviction to show up day after day with a fighting spirit.



## Competence

Technical strengths, and technical adjustment may be necessary as the player's game style evolves. The player maintains a good technical base to reinforce their confidence. The player should always be open to evolving technically.

**Tactical:** As the player gets older, there is a high probability they will need to adjust their game style to maximize results and extend their career on the tour. They may need to find ways to shorten the length of the points or new tactical patterns to adjust as a new generation of players emerges. At this stage, the player knows their tactics, strengths, and weaknesses perfectly. Building on their experience, they are moving towards a slightly more aggressive game as they become more confident. Tactical evolution is a source of motivation. Since the physical demand is very high, the player may choose to spend less time on the court.

- **Neutral:** The shot quality in rallies has the right balance between aggressiveness and consistency.
  - The player can reach any part of the court from almost anywhere.
  - The transitions between the three game phases (attack, neutral, defence) are very frequent in the same point.
  - On the second serve, the speed and quality of the target are important with a focus on precision and ball movement (for example, the spin-speed is the ball going out of the court and stretching the opponent enough and the ability to build or counterpunch on the second shot after the serve will make a difference).
  - The player aims for over 50% of points won on their second serve.
  - Long and deep returns remain the preferred option, and the player's returning position varies. The ability to be effective from extreme positions on the return is important.
- **Offence:** The player capitalizes on opportunities—the only way to win at the highest level.
  - On the first serve: Speed, accuracy, first-serve percentage, and quality of the Serve +1 are making a difference.
  - The player aims for 65-75% of first serves in play and to win approximately 80-85% of first-serve points.
- **Defence:** Players are mastering the art of counterpunching.
- **Doubles:** To develop proficiency as a team when serving and returning, a player will seek a stable partner. The player continues to develop their automatic tactical choices.





**Physical:** The main objective is optimizing the player's physical aptitudes to reach the highest level of performance based on the game profile. Managing the training load with an individualized physical program becomes more important. The coach plans to get the player to their best level of fitness, alternating between periods of development, competition, and rest.

- Develop tennis-specific skills through strength, speed, and repetition of effort. Muscle strengthening is focused on the body, but sessions must target the lower limbs, torso, and upper limbs. Endurance must be developed through a range of activities and especially the repetition of high-intensity efforts integrating specific efforts on the tennis court.
- Individualize training based on the player's profile. The physical aptitudes must be expressed in competition, allowing for a complete playing style. The development of power, explosiveness, strength, endurance, and speed must continue during competition.
- Be efficient in various physical situations, stimulate creativity, and seek solutions in emotionally challenging situations: The player continues to develop greater autonomy and invest in their physical development.

#### **Training and competition :**

- Nutrition and hydration: Ensure the player has adopted periodized nutrition plans based on the annual training plan and make sports nutrition support available to assist with food record testing and monitoring, dietary patterns, and energy balance throughout the year. The player should feel confident monitoring hydration and have a well-tested hydration plan for training and competition that may easily be adjusted to ensure optimal performance.
- Recovery: The player has a well-tested nutrition and physical recovery plan that can easily be adjusted based on the demands of travel, training and competition.
- Sleep: Sleep management is well-developed and a high priority, especially regarding jet lag and international competition.
- Independence: The player relies on a self-directed approach or works with a sports management agency on certain aspects of the plan.
- Family support network: Emotional and financial support and resources continue to be important to create a positive, holistic, and competitive high-performance environment.
- Mental health: Continue to reinforce open dialogue and a supportive network for good mental health and develop individual mental health strategies, including breathing exercises, time away from tennis, meditation, and music.



# PERFORMANCE

- **Travel and jet lag:** A well-developed plan should be in place.
- **Player health and well-being:** Ensure the player is aware of doping control procedures, including in and out of competition testing. The player must comply with all ITF/WTA/ATP anti-doping requirements and understand their rights as an athlete. It is important to continue to find a balance between tennis, family, friends, and school and plan for non-tennis activities, like sightseeing, when abroad. Use [Game Plan](#) resources for support with education, post-tennis career, and the transition after retirement.
- **Academics and time management**
- **Brand management:** Assist the player in building their brand through solid media training and sponsorships.
- **Equipment and court:** Players will customize their racquets according to their game style and preferences making sure all racquets have the same specs (weight, swing range, etc.).



# ***THANK YOU***

**[tennniscanada.com](http://tennniscanada.com)**

# ***APPENDIX***





# APPENDIX

## Appendix A: Recommendations for training and competition volumes

### Player A

The player started playing tennis at 5 or 6 years of age, and the family identified tennis as their primary sport early on. They were active in other sports and physical activities but only as complementary leisure and education.

- Player entered the Top 100 between 19 and 21 years of age and eventually the Top 50 a few years later.

	Private Session	Semi Private	Group Session	Practice Match	Official Match	Specific Fitness	Other sports
<b>At the end of Stage 1</b>							
Q1	1h/week	1h/week	2-3h/week	1 adapted game/week			yes
Q2	1h/week	1h/week	2-3h/week	1 adapted game/week			yes
Q3	1-2h/week	1-2h/week	8h/week	1 adapted game/week			yes
Q4	1h/week	1h/week	2-3h/week	1 adapted game/week			yes
<b>At the end of Stage 2</b>							
Q1	2-3h/week	2-3h/week	2h/week	1/week	35 singles low	introduction	yes-secondary
Q2	2-3h/week	2-3h/week	2h/week	1/week	medium	introduction	yes-secondary
Q3	1-2h/week	1-2h/week	8h/week	3/week	high	introduction	yes-secondary
Q4	2-3h/week	2-3h/week	2h/week	1/week	medium	introduction	yes-secondary
<b>At the end of Stage 3</b>							
Q1	3-4h/week	3-4h/week	5-6h/week	2/week	50 s. + 10 d. low	3h/week	no-casual
Q2	3-4h/week	3-4h/week	5-6h/week	2/week	medium	3h/week	no-casual
Q3	2-3h/week	2-3h/week	6-8h/week	3/week	high	3h/week	no-casual
Q4	3-4h/semaine	3-4h/week	5-6h/week	2/week	medium	3h/week	no-casual
<b>At the end of Stage 4</b>							
Q1	5-6h/week	8-10h/week	1-2h/week	2/week	60 s. + 35 d. low - 2/3 ITF Jr	6 sessions/week	no-casual
Q2	5-6h/week	8-10h/week	1-2h/week	2/week	high- 1/3 Open ITF Pro	6 sessions/week	no-casual
Q3	2-3h/week	8-10h/week	1-2h/week	3/week	high	6 sessions/week	no-casual
Q4	5-6h/week	8-10h/week	1-2h/week	2/week	medium	6 sessions/week	no-casual
<b>At the end of Stage 5</b>							
Q1	6-8h/week	6-8h/week	no	3/week	71 s. + 20 d. Jr GS-J1	6 sessions/week	
Q2	6-8h/week	6-8h/week	no	2/week	Pro(Open, UTR,	6 sessions/week	
Q3	6-8h/week	6-8h/week	no	2/week	Future, ATP)	6 sessions/week	
Q4	10-12h/week*	6-8h/week	no	3/week		6 sessions/week	
<b>Stage 6</b>							
Q1 - individualized	individualized	individualized	no	1/week	60 s. + 15 d. All ATP	6 sessions/week	
Q2 - individualized	individualized	individualized	no	1/week	Pro (Open, UTR,	6 sessions/week	
Q3 - individualized	individualized	individualized	no	1/week	Future, ATP)	6 sessions/week	
Q4 - individualized	individualized	individualized	no	3/week		6 sessions/week	
<b>Stage 7</b>							
Q1	individualized	individualized	no	1/week	50 s + 15 d. All ATP	6 sessions/week	
Q2	individualized	individualized	no	1/week	Pro (Open, UTR,	6 sessions/week	
Q3	individualized	individualized	no	1/week	Future, ATP)	6 sessions/week	
Q4	individualized	individualized	no	3/week		6 sessions/week	
*off season compensation							

# APPENDIX

## Player B

The player started playing tennis at 6 or 7 years of age and was involved in other sports until the age of 12 or 13, when they dedicated themselves to tennis. They had multiple experiences in other competitive sports and physical activities, especially before the age of 12 or 13.

- Player entered the Top 100 between 19 and 21 years of age and eventually the Top 50 a few years later.

	Private Session	Semi Private	Group Session	Practice Match	Official Match	Specific Fitness	Other sports
<b>At the end of Stage 1</b>							
Q1							
Q2							
Q3							
Q4							
<b>At the end of Stage 2</b>							
Q1		2-3/week	2-3/week	1/week	low		Intensive
Q2	1-2h/week	2-3h/week	2-3h/week	2/week	medium		Intensive
Q3	1-2h/week	2-3h/week	2-3h/week	3/week	medium		Intensive
Q4		2-3h/week	2-3/week	1/week	low		Intensive
<b>At the end of Stage 3</b>							
Q1		1-2h/week	2h/week	1-2h/week	low	introduction	Yes- Competitive
Q2	2-3h/semaine	2-3h/week	2-3h/week	3/week	medium	introduction	Yes- Competitive
Q3	2-3h/semaine	2-3h/week	2-3h/week	3/week	medium	introduction	Yes- Competitive
Q4		1-2h/week	2h/week	1-2h/week	low	introduction	Yes- Competitive
<b>At the end of Stage 4</b>							
Q1	3-5h/week	5-6h/week	1-2h/week	3/week	2/3 ITF	every day	No - casual
Q2	3-5h/week	5-6h/week	1-2h/week	3/week	1/3 Open	every day	
Q3	3-5h/week	5-6h/week	1-2h/week	3/week		every day	
Q4	4-5h/week	5-6h/week	1-2h/week	3/week		every day	
<b>At the end of Stage 5</b>							
Q1	6-8h/week	6-8h/week	no	3/week	1/3 ITF	1-2 sessions/week	
Q2	6-8h/week	6-8h/week	no	2/week	2/3 ATP	1-2 sessions/week	
Q3	6-8h/week	6-8h/week	no	2/week		1-2 sessions/week	
Q4	10-12h/week*	6-8h/week	no	3/week		1-2 sessions/week	
<b>Stage 6</b>							
Q1 - individualized	individualized	individualized	no	3/week	All ATP	6 sessions/week	
Q2 - individualized	individualized	individualized	no	2/week		6 sessions/week	
Q3 - individualized	individualized	individualized	no	2/week		6 sessions/week	
Q4 - individualized	individualized	individualized	no	3/week		6 sessions/week	
<b>v</b>							
Q1	individualized	individualized	no	1/week		6 sessions/week	
Q2	individualized	individualized	no	1/week		6 sessions/week	
Q3	individualized	individualized	no	1/week		6 sessions/week	
Q4	individualized	individualized	no	3/week		6 sessions/week	
	*off season compensation						

# APPENDIX

## Player C

The player started playing tennis later than players in Pathway A and B, between 9 and 11 years of age. They played other sports and by 13 to 15 years of age dedicated themselves to tennis. They were very active outside tennis, in other competitive sports or physical activities, at a young age.

- Player entered the Top 100 at 22 or 23 YEARS OF AGE and eventually the Top 50 a few years later.

	Private Session	Semi Private	Group Session	Practice Match	Official Match	Specific Fitness	Other sports
<b>At the end of Stage 1</b>							
Q1							
Q2							
Q3							
Q4							
<b>At the end of Stage 2</b>					<b>10 singles</b>		
Q1		2-3/week	2-3/week	1/week	low		Intensive
Q2	1-2h/week	2-3h/week	2-3h/week	2/week	medium		Intensive
Q3	1-2h/week	2-3h/week	2-3h/week	3/week	medium		Intensive
Q4		2-3h/week	2-3/week	1/week	low		Intensive
<b>At the end of Stage 3</b>					<b>35 s. + 10 d.</b>		
Q1		1-2h/week	2h/week	1-2h/week	low	introduction	Yes- Competitive
Q2	2-3h/semaine	2-3h/week	2-3h/week	3/week	medium	introduction	Yes- Competitive
Q3	2-3h/semaine	2-3h/week	2-3h/week	3/week	medium	introduction	Yes- Competitive
Q4		1-2h/week	2h/week	1-2h/week	low	introduction	Yes- Competitive
<b>At the end of Stage 4</b>					<b>60 s. + 25 d.</b>		
Q1	3-5h/week	5-6h/week	1-2h/week	3/week	2/3 ITF	every day	No - casual
Q2	3-5h/week	5-6h/week	1-2h/week	3/week	1/3 Open	every day	
Q3	3-5h/week	5-6h/week	1-2h/week	3/week		every day	
Q4	4-5h/week	5-6h/week	1-2h/week	3/week		every day	
<b>At the end of Stage 5</b>					<b>85 s. + 20 d.</b>		
Q1	6-8h/week	6-8h/week	no	3/week	1/3 ITF	1-2 sessions/week	
Q2	6-8h/week	6-8h/week	no	2/week	2/3 ATP	1-2 sessions/week	
Q3	6-8h/week	6-8h/week	no	2/week		1-2 sessions/week	
Q4	10-12h/week*	6-8h/week	no	3/week		1-2 sessions/week	
<b>Stage 6</b>					<b>65 s. + 20 d.</b>		
Q1 - individualized	individualized	individualized	no	3/week	All ATP	6 sessions/week	
Q2 - individualized	individualized	individualized	no	2/week		6 sessions/week	
Q3 - individualized	individualized	individualized	no	2/week		6 sessions/week	
Q4 - individualized	individualized	individualized	no	3/week		6 sessions/week	
<b>v</b>					<b>55 s. +15 d.</b>		
Q1	individualized	individualized	no	1/week		6 sessions/week	
Q2	individualized	individualized	no	1/week		6 sessions/week	
Q3	individualized	individualized	no	1/week		6 sessions/week	
Q4	individualized	individualized	no	3/week		6 sessions/week	
	*off season compensation						

# APPENDIX

## Player D

The player initially followed pathways A, B, or C and then remained in development stage 6 for an extended period of time (or even between stages 5 and 6) for various reasons (e.g., due to a lengthy injury, the struggle to find the mental pathway (stage 6), or the decision to play college tennis (NCAA) and then transition to the pro tour after graduation).

- Player entered the Top 100 between 22 and 25 YEARS OF AGE and eventually the Top 50 a few years later.

	Private Session	Semi Private	Group Session	Practice Match	Official Match	Specific Fitness	Other sports
<b>End of Stage 1</b>							
Q1 same as player A							
Q2 same as player A							
Q3 same as player A							
Q4 same as player A							
<b>End of Stage 2</b>					<b>Q1 same as Player A, B, or C</b>		
Q1 same as Player A, B, or C							
Q2 same as Player A, B, or C							
Q3 same as Player A, B, or C							
Q4 same as Player A, B, or C							
<b>End of Stage 3</b>					<b>Q1 same as Player A, B, or C</b>		
Q1 same as Player A, B, or C							
Q2 same as Player A, B, or C							
Q3 same as Player A, B, or C							
Q4 same as Player A, B, or C							
<b>End of Stage 4</b>					<b>Q1 same as Player A, B, or C</b>		
Q1 same as Player A, B, or C							
Q2 same as Player A, B, or C							
Q3 same as Player A, B, or C							
Q4 same as Player A, B, or C							
<b>End of Stage 5</b>					<b>Q1 same as Player A, B, or C</b>		
Q1 same as Player A, B, or C							
Q2 same as Player A, B, or C							
Q3 same as Player A, B, or C							
Q4 same as Player A, B, or C							
<b>Stage 6</b>					<b>80 s. + 35 d.</b>		
Q1	17-19h/week in Pro (7-9h/week in college)	No in Pro - 7-9h/week in college	3/week	ATP and Interclubs	6 sessions/week in Pro (6 hrs)	1hr/day in college	
Q2	17-19h/week in Pro (7-9h/week in college)	No in Pro - 7-9h/week in college	2/week	yes	6 sessions/week in Pro (6 hrs)	1hr/day in college	
Q3	17-19h/week in Pro (7-9h/week in college)	No in Pro - 7-9h/week in college	2/week	NCAA Championship and Tour	6 sessions/week in Pro (6 hrs)	1hr/day in college	
Q4	19-21h/week in Pro (9-11h/week in college)	No in Pro - 9-11h/week in college	3/week	ATP in summer and fall	10 sessions/week in Pro (10 hrs)	1hr/day in college	
<b>Stage 7</b>					<b>65 s. +15 d.</b>		
Q1	individualized	individualized	no	1/week		6 sessions/week	
Q2	individualized	individualized	no	1/week		6 sessions/week	
Q3	individualized	individualized	no	1/week		6 sessions/week	
Q4	individualized	individualized	no	3/week		6 sessions/week	
	*off season compensation						



# APPENDIX

## Stage 2

TACTICAL	TECHNICAL (STROKE PRODUCTION)	FOOTWORK (MOVEMENT AND BALANCE)
<b>Tactical:</b> <ul style="list-style-type: none"> <li>To develop the mentality of putting one more ball in the court</li> <li>Plays with consistency and cooperates with partner</li> <li>To learn the ability to move the opponent through change direction</li> <li>Initial situation recognition to hit higher ball trajectory when in defensive situation</li> <li>Overall consistency and focus equally on both sides</li> <li>Taking control of the middle with the FH</li> </ul>	<b>Groundstroke and Returns:</b> <ul style="list-style-type: none"> <li>FH grip (Eastern to mild semi-western / no extreme semi-western)</li> <li>All other strokes: Continental</li> <li>Ready position: Hands in front with racket head above the wrist (including when serving)</li> <li>Unit turn (chin over shoulder to chin over shoulder)</li> <li>Players are focused on the control of the ball (feel of the ball/soft hand)</li> <li>Timing (consistent point of contact)</li> <li>Balanced hitting using the non-dominant arm on FH, tip stance finish</li> <li>Weight transfer from back to front foot pre impact on the groundstrokes.</li> <li>Early Preparation before ball crosses the net</li> <li>Consistent impact between waist and shoulders</li> </ul> <b>Volley:</b> <ul style="list-style-type: none"> <li>Racquet at eyes level in front of the body with elbows in front</li> <li>Catching action</li> </ul> <b>Overhead:</b> <ul style="list-style-type: none"> <li>Sideways position</li> <li>Racquet in Proper throwing position (trophy)</li> </ul> <b>Serve:</b> <ul style="list-style-type: none"> <li>Establish a balanced starting position</li> <li>Control of toss</li> <li>Racquet in throwing position</li> <li>Follow through on the opposite side of the body</li> </ul>	<b>Groundstroke and Returns:</b> <ul style="list-style-type: none"> <li>Develop a well-timed split step and ready position</li> <li>Player displays an athletic look and is always ready to receive the ball.</li> <li>To develop proper lateral movements</li> <li>Emphasis to recover back to home base quickly</li> </ul>

# APPENDIX

TACTICAL	TECHNICAL (STROKE PRODUCTION)	FOOTWORK (MOVEMENT AND BALANCE)
<p><b>Tactical:</b></p> <ul style="list-style-type: none"> <li>To improve the ability to move the opponent through the change direction with higher level of consistency and quality (precision)</li> <li>Mastering the 3 elements of control: direction, depth and height</li> <li>To develop percentage tennis/ consistency through shot recognition skills and ability to respond properly (short/attack, difficult/defend, rally/stay in the point)</li> <li>To learn to control the middle of the court with FH</li> <li>Looks to play opponent's BH (including off serve)</li> <li>Serving high percentage of serve (with spins)</li> <li>Sends arched ball for more defensive ball</li> <li>Approach, play and finish the point at the net covering the right space</li> <li>Plays the opponents weakness</li> </ul>	<p><b>Groundstroke and Returns:</b></p> <ul style="list-style-type: none"> <li>Develop feel and touch on a variety Continental grip on bottom hand for two-hand BH, BH slice, volley and serve</li> <li>Longer striking zone off groundstrokes</li> <li>Development of proper unit turn / pre-stretch</li> <li>To develop the ability to hit ball on the rise</li> <li>Develop feel through the development of various spins (slice, top spin)</li> <li>Early unit turn using the non-dominant hand</li> <li>Consistent impact between waist and shoulders,</li> <li>Smooth and effortless stroke</li> </ul> <p><b>Volley:</b></p> <ul style="list-style-type: none"> <li>Continental Grip</li> <li>Elbows in front away from body</li> <li>Racquet head above the wrist</li> <li>Impact slightly in front</li> <li>Catching action (adding, maintaining or taking off speed)</li> </ul> <p><b>Overhead:</b></p> <ul style="list-style-type: none"> <li>Continental Grip</li> <li>Use of non-dominant hand arm to point the ball</li> <li>Racquet in a throwing position (trophy)</li> </ul> <p><b>Serve:</b></p> <ul style="list-style-type: none"> <li>Development of the serve (spin/ oblique 1st and 2nd serves)</li> <li>Modified grip leading to continental grip</li> <li>Balance throughout shot</li> <li>Consistent toss and (proper) synchronization of the arms</li> <li>Proper throwing action</li> </ul>	<p><b>Groundstroke and Returns:</b></p> <ul style="list-style-type: none"> <li>well timed split step</li> <li>first step out to run to the ball</li> <li>recover back quickly to base (crossover first step)</li> <li>moving forward/back</li> <li>To favor neutral stances in good balance</li> <li>Disassociation between upper and lower body when lining up the incoming ball</li> <li>Set-up base (feet) before ball bounce with proper stance (neutral, semi-close or semi-open)</li> <li>Forward body transfer from back to front</li> <li>Balance through the shot</li> <li>Initiate the proper first step of recovery (shuffle, cross or sprint)</li> </ul> <p><b>Volley:</b></p> <ul style="list-style-type: none"> <li>Coordinate shoulder turn with the feet</li> <li>Developing proper footwork for different situations including step out</li> <li>Balance throughout shot</li> <li>Recover before opponent's hit</li> </ul> <p><b>Overhead:</b></p> <ul style="list-style-type: none"> <li>Backwards shuffle and crossover steps</li> <li>Move forward with body weight at impact</li> <li>Balance throughout shot</li> </ul> <p><b>Serve:</b></p> <ul style="list-style-type: none"> <li>Recover to home base before opponents' hits</li> </ul>

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TACTICAL	TECHNICAL (STROKE PRODUCTION)	FOOTWORK (MOVEMENT AND BALANCE)
<p><b>Tactical:</b></p> <ul style="list-style-type: none"> <li>• Able to change direction with consistency and increased pace/tempo</li> <li>• Able to change direction while moving</li> <li>• To learn to stay in the point by neutralizing with improved defensive shots</li> <li>• Players demonstrate more advanced shot recognition and ability to adapt/respond with more quality and consistency</li> <li>• Mastering the 3 elements of control: direction, depth, height, (spin and speed later)</li> <li>• Consistently takes the FH to control the middle of the court</li> <li>• Player displays a tactical understanding of when to play early to reduce the opponent's reaction time &amp; when to defend to buy more time.</li> <li>• Develop passing shot skills when the opponent comes to the net.</li> <li>• Serving high percentage of first serve (slice or combination spins) + ability to place it to opponent's backhand + first shot after serve (FH)</li> <li>• Develop a transition game</li> <li>• Learn to return from different positions</li> <li>• Return with quality rally balls to opponent's backhand or to attack second serve (from inside the baseline)</li> <li>• Being aware of opponents' strength &amp; weaknesses</li> <li>• Promote more double play</li> </ul>	<p><b>Groundstroke and Returns:</b></p> <ul style="list-style-type: none"> <li>• Develop feel and touch on a variety of shots</li> <li>• Longer striking zone on all strokes</li> <li>• Weapon development of the FH / Ability to flatten the FH from inside the baseline at shoulder height ball</li> <li>• To develop the transition game (able to come to net to finish point (short, deep &amp; angle volley skills)</li> <li>• Ability to challenge the opponent's movement skills through opening the court while using correct technique required to hit with spin (topspin, slice).</li> <li>• Complete rotations of shoulders -FH and 2 handed BH (unit turn and finishing the full stroke)</li> <li>• Synchronizing the hip rotation (kinetic chain)</li> <li>• Ability to hit aggressively off the 2nd serve return from inside the baseline (FH &amp; BH)</li> </ul> <p><b>Volley:</b></p> <ul style="list-style-type: none"> <li>• Develop the different skills and feel at the net (block, punch, counter, drop)</li> </ul> <p><b>Overhead:</b></p> <ul style="list-style-type: none"> <li>• The importance of getting behind &amp; under the ball with your feet</li> <li>• Ensure Impact in front at 1 o'clock with follow-through (dominant shoulder go forward)</li> </ul> <p><b>Serve:</b></p> <ul style="list-style-type: none"> <li>• Further development of the serve (oblique, slider, topspin 2nd serve)</li> <li>• More emphasis on the fundamentals of the 2nd serve</li> <li>• Consistent toss for an impact in front and to the right (1 o'clock) reaching up</li> <li>• Hammer action (will lead to pronation)</li> </ul>	<p><b>Groundstroke and Returns:</b></p> <ul style="list-style-type: none"> <li>• At the baseline, to be able to perceive and receive the ball and adjust footwork quickly (move in, move back or stay) with optimal recovery position on the court depending of the situation of play thereafter their shot</li> <li>• Develop specific coordination skills for stroke production to enhance optimal technique and stroke effectiveness, facilitating the formation of efficient biomechanical skills</li> <li>• To develop quicker reception skills of the upcoming ball after the first and second serve (first shot)</li> <li>• Running skills (ex: use your racquet, various foot work: shuffle/run, cross-over/run etc.)</li> <li>• Push them outside their comfort zone on the footwork</li> <li>• Players displays wide base/ creates pre-stretch of the legs prior to impact</li> <li>• Quick reaction and timing of the split steps</li> </ul> <p><b>Volley/overhead:</b></p> <ul style="list-style-type: none"> <li>• Transitioning to the net to volley (moving forward and timing the split step)</li> <li>• Develop the footwork on the overhead to be able to get to the service line in 3 steps.</li> </ul> <p><b>Serve:</b></p> <ul style="list-style-type: none"> <li>• Recover tactically to the right place before opponents hit</li> </ul>