

TRANSITION FROM THE RED TO ORANGE TO GREEN BALL

SYNOPSIS

- A proper transition from the red to orange to green ball should be based on sound technique and tactical competencies rather than impatience to skip from one level to the next.
- There is a normal decrement in performance with each transition phase, and this decrement can be much greater if a premature transition is made.
- When children transition too quickly from one ball to another, there is a much greater likelihood that they will develop technical flaws as a means of compensating for developmentally inappropriate play.

There are not concrete guidelines about when a child should transition from a red ball/red court to an orange ball/orange court to a green ball. It is possible that making a transition from one ball to another could become associated with a race to make the transition as quickly as possible.³⁵ This is in part because some people associate the non-yellow balls as “not real” tennis balls, and they furthermore associate the smaller courts as “not real” courts. It is important to educate all stakeholders that the red, orange and green balls are all a legitimate part of progression in tennis, and are as real—and appropriate—for children as the yellow ball is for adolescents and adults.³¹ The transition is based on a natural progression in technique, skill, athleticism, and age. Because each child matures differently, and because there is no known correlation between a fast transition in childhood to teenage and adulthood performance, there is

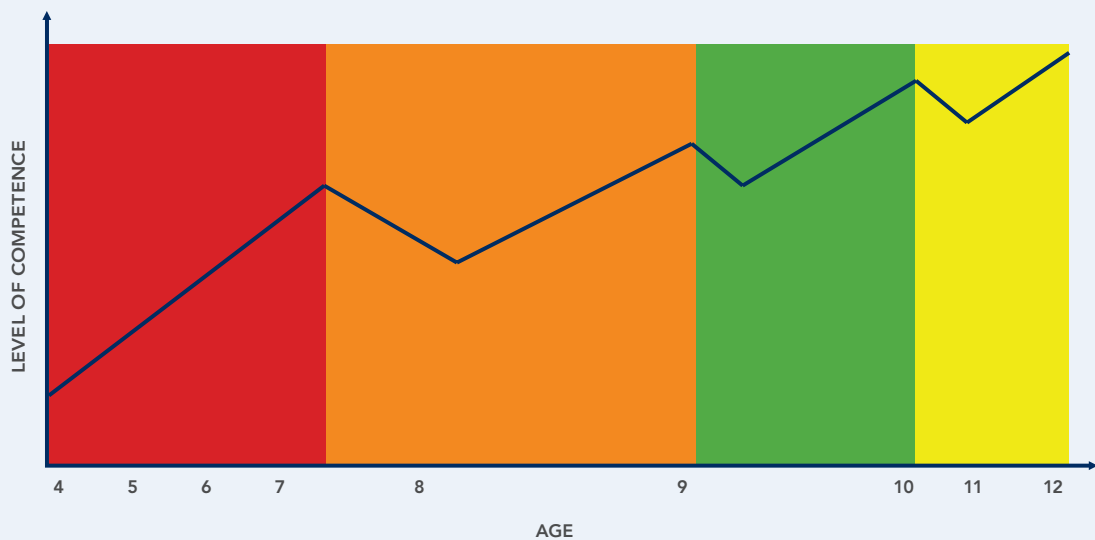
no reason to hurry the transition prematurely. The transition should not be placed in the context of a “race” in which moving quickly is equivalent to “winning.” When working with children, winning should never override proper development.³⁰

With regard to a competitive structure, the national governing body (NGB) must choose the rules, and most often the rules are determined by age category.³⁵ Even within this framework there exists the possibility for experimentation. For example, rather than designating a single year (e.g. 7-and-under, 8-and-under) or every two-year transition (e.g., 8-and-under, 10-and-under), it is possible to develop a competitive schedule that divides a year in two. That means that for 8-and-under, there could be two divisions that roughly follow the school year: 8-and-under players born between September and March, and 8-and-under players born between April and August.³⁵ The reason to consider such a schedule is that a child’s success in sports is often determined by his or her date of birth.¹⁹ If we follow the strict calendar year, a child born in January has an almost one-year advantage over a child born in December, which is a substantial proportion of time in such a young child. In the United States, the potential age advantage is neutralized somewhat by allowing children to play in their age group until the month they age up.

When working with children, winning should never override proper development.

The other variables to consider are whether the transition is for a player development-competition track or for a community tennis-friendly play track. For player development, the competition and training transition are in parallel, but even

PATH OF PROGRESS FOR TRANSITION IN 10 AND UNDER TENNIS



Source: ITF

in this scenario, there can be flexibility. For example, a player may transition from the orange to the green ball but may still have difficulty with the backhand volley technique. Utilizing deliberate practice/ closed play, a coach could work specifically with the orange ball for the backhand volley while the player otherwise trains with the green ball, and he or she will transition fully to the green ball after improving technique in the backhand volley with the orange ball.⁶²

If a player makes a transition too quickly, the player will likely feel frustrated at playing worse and may even lose interest. As noted in the chart above, almost all players will experience a decrement in performance when making a transition from one ball to another, which means that there could be less emphasis on competition during the transition phase.

If the player is not technically ready to make the transition, then the performance decrement would be expected to be much greater. This would likely translate to less fun for the player, and fun is what drives the player to continue to play over time.⁹⁶

It is essential for coaches to be well versed in the maturational expectations of childhood as well as the technical competencies that allow for the best transition from the red to orange to green ball.^{24, 43} Many countries are in the process of experimenting with different ways to make the transition, but virtually all rely on the models below, which are based on ITF research.

The diagram on the following page illustrates the technique competencies developed by the ITF that guide children in making a smooth transition from the red to orange to green ball.

TRANSITION AND TECHNIQUE COMPETENCIES

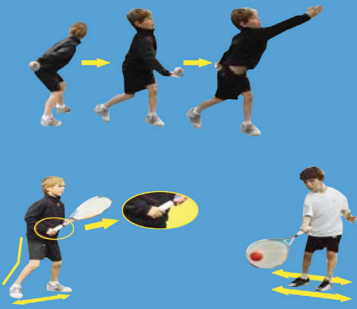
Ages 5 – 6

Throwing/sending:

- Half open stance
- Hold the racket at the bottom, close to the butt-cap

Catching/receiving:

- Be alert and dynamic
- Well balanced position when throwing and catching
- Hitting the ball in front of the body
- Good balance while hitting the ball and having good distance from the ball



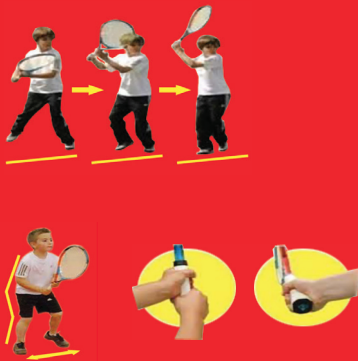
Ages 6 – 7

Throwing:

- Half open to open stance
- Initiate shoulder turn
- Hit the ball in front of the body

Receiving and return of serve:

- Dynamic, attentive and alert
- Holding the racket close to the bottom/butt-cap and distinguishing between forehand and backhand grip
- Early rotation of the shoulder and trunk
- Hitting the ball in front of the body
- Good control of balance



Ages 9 – 10

- Dynamic, attentive and alert
- Good acquisition of forehand and backhand grip
- Turning/rotation of the trunk right after split step
- Follow through higher than the contact point
- Compact backswing before hitting the ball
- Racket head acceleration with the arm and lower arm/ wrist action
- Hitting the ball in front of the body and following through
- Various forms of footwork: open, semi open or square stances depending on situation/ tactic
- Good control of balance by using different stances
- Various forms of recovery according to situation



Ages 11 and Up

- Adjustment of the backhand grip according to the spin needed
- Separation of the upper body and lower body according to the stance used
- Racket head lower to give more spin
- More racket head acceleration with the arm and lower arm/wrist action
- At the end of the backswing, the balance should be forward according to the stance and target
- Follow through according to the spin applied and tactical objective



Source: ITF

It is noteworthy that each transition is associated with more sophisticated stance, footwork, racquet swing, racquet grip, and dissociation of upper and lower body movements.

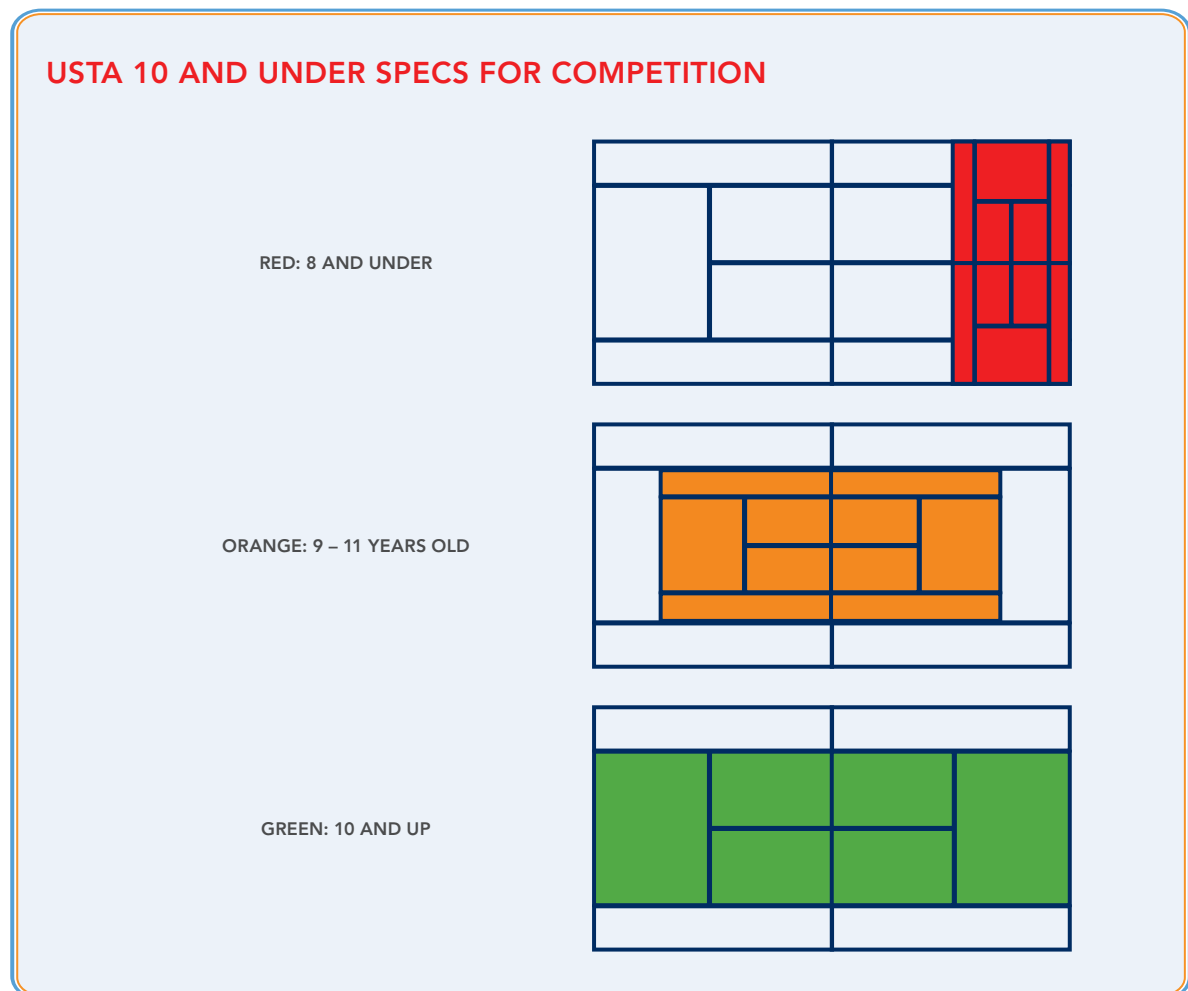
The illustration below illustrates the age-driven transition.

Although this type of transition is easier to administer and does not require the more coach-driven intervention, the danger of relying simply on age to determine advancement is that the child may not be physiologically or technically ready to make the change, and a premature change can lead to premature dropout.^{31, 96}

Even for proficient green ball 10-and-under tennis players, there is no good evidence to suggest that players should be

transitioned to a yellow ball prematurely. It is only in exceptional cases that a 10-and-under tennis player should make the full transition to a yellow ball, with the caveat that player ability and player ranking pre-puberty do not correlate with late teenage and adulthood success.^{30, 31, 35}

It is appropriate for 10-and-under tennis children to compete, but the competition should be fun while utilizing a short scoring format. Ideally, most competition matches will last about 20 minutes or less for 8-and-under children (e.g., 2-out-of-3 tie-breaks), thus allowing an abundance of play opportunities with many different children.^{31, 96, 121} As children age, they can tolerate longer-duration matches; for example, 9- and 10-year-old children can play 2-out-of-3 short sets, which could last 20 to 45 minutes.¹⁵



Source: ITF (modified)

The table below illustrates the approach some countries take with regard to 10-and-under tennis competition while utilizing the red, orange, or green ball.

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The ITF does not allow 10-and-under children to play international events.⁹⁶ Most NGBs do not hold national 10-and-under championships, nor do they rank 10-and-under children. Indeed, only

two countries (Brazil and France) hold annual singles national 10-and-under championships, although Great Britain hosts a national invitational tournament for 9-and-under and 10-and-under children. Great Britain uses the orange ball for its 9-and-under invitational event, and otherwise the green ball is used by Great Britain, Brazil, and France for their 10-and-under national events, and they employ a shortened scoring format. None of these countries has a 10-and-under national ranking in place.

10-AND-UNDER COMPETITION IN SELECT COUNTRIES

Country	Red Scoring	Red Match Format	Orange Scoring	Orange Match Format	Green Scoring	Green Match Format
Australia	Varies among territories	Various scoring and match formats	To be announced	To be announced	To be announced	To be announced
Belgium	Single tie-break to 10, or 7-point tie-break if limited courts	Round robin individual	10-point tie-break for recreational; 2-of-3 short sets for competitive	Round robin without winners for recreational; draws with consolation for competitive	10-point tie-break (Kinder Tour) or 2-of-3 short sets with tie-break at 3-3 for Volvo Tour	Round robin for Kinder Tour and draws for Volvo Tour
Canada	First to 15 or 21 points, alternate serves every 2 points; 10-15-minute timed matches	Round robin or team matches, to guarantee 2-3 matches	2-of-3 short sets with no-ad scoring, tie-break at 3-3	Round robins with team and individual; 3 matches minimum with time limit of 45 minutes	Same scoring format as for orange ball	Same as for orange ball
France	All scoring allowed; start 1-2-3-4, then regular scoring	Clubs free to choose format; strongly recommend doubles and team, plus multi-sport	Same as red for recreational; 2 sets of 4 games each with tie-break at 3-3 for competitive	Round robins and compass draws; promote teams and doubles, especially for girls	Set to 5 games, tie-break at 4-4, no-ad scoring	Compass draws Friday afternoon to Sunday noon
Great Britain	Regular tie-break and match	All round robin with teams	2-of-3 tie-break sets	Mostly round robin	2-of-3 short sets	Mostly elimination and compass draws
Netherlands	Tie-break and 2-of-3 tie-breaks, with much disparity	Round robins, team and individual competitions	2-of-3 short sets	Round robin with some elimination	2-of-3 short sets and some 2-of-3 sets to 6	Various formats
Spain	2-of-3 tie-breaks	Round robin and team matches in weekend comp	2-of-3 short sets, win by 2 with no-ad	Team and individual format, guarantee 2 matches; lasts 2-3 days	2-of-3 sets to 6 games	Round robin and elimination draws over 3-7 days

Source: USTA

All USTA sections have some type of competitive structure for 10-and-under tennis players. The chart below, however, demonstrates that the USTA sections do not have a unified system for 10-and-under competition with regard to the balance of orange and green ball tennis.

USTA SECTIONAL 10-AND-UNDER COMPETITION				
Section	Junior Members	U10 Tournaments	U10 Levels	U10 Ball Use
Caribbean	1,582	8	1	100% orange
Eastern	19,328	318	5	70% green, 30% orange
Florida	17,263	750	4	100% orange
Hawaii Pacific	1,646	45	2	66% green, 33% orange
Mid-Atlantic	10,501	159	5	15% green, 85% orange
Middle States	10,298	40	2	10% green, 90% orange
Midwest	35,567	839	7	93% green, 7% orange
Missouri Valley	8,036	204	2	23% green, 77% orange
New England	10,257	80	1	100% orange
Northern	5,361	35	1	100% orange
Northern California	13,649	120	3	85% green, 15% orange
Pacific Northwest	5,905	204	3	100% orange
Southern	55,280	965		100% orange
Southern California	16,021	350	3	79% green, 21% orange
Southwest	3,779	116	4	100% orange
Texas	19,970	310	2	50% green, 50% orange

Source: USTA

USTA PLAYER DEVELOPMENT PERSPECTIVE¹⁵

In the USTA Player Development model, technique and tactical competencies are combined when providing the red ball to orange ball transition guidelines for children. As the table below indicates, children must develop red ball proficiency for the forehand, backhand, combo, serve, return and volley before they transition to the orange ball.

10 AND UNDER COMPETENCIES IN TRANSITION FROM RED BALL/36-FOOT COURT TO ORANGE BALL/60-FOOT COURT			
	Hands	Feet	Eyes and Mind
Forehand	Grip: Eastern to semi-western Unit turn Preparation: Racquet above the wrist	Ready position Lateral movement Split step	Moving forward → down the line Moving back → high cross-court
Backhand	Grip: Bottom hand: Continental; Top Hand: Continental to eastern Unit turn Preparation: Racquet above the wrist	Recovery: cross-over Diagonal movement Forward movement Stances: closed, semi-open	Control/direct ball to zones of the court (7 out of 10) to each zone Topspin & slice Open court zone
Combo	Transition grip between forehand and backhand	Lateral movement Split step Recovery step	Side to side (7 out of 10)
Serve	Continental grip Coordinated service motion Consistent contact point	Balance Stable platform	7 out of 10 to the correct box—each side
Return	Grips Ready position Quick unit turn	Split step	7 out of 10—return to each side
Volley	Continental grip	Split before contact	Volley to open court (7 out of 10)

Source: USTA

Children must also develop orange ball proficiency for the same aspects of the game before transitioning to the green ball, as noted in the table on the next page.

10 AND UNDER COMPETENCIES IN TRANSITION FROM ORANGE BALL/60-FOOT COURT TO GREEN BALL/78-FOOT COURT

	Hands	Feet	Eyes and Mind
Forehand	<p>Introduce racquet-head acceleration</p> <p>Consistent contact point</p> <p>Moving toward full extension at point of contact</p> <p>Unit turn, working on keeping non-dominant hand on racquet until the hitting shoulder rotates</p> <p>Wrist load/pre-stretch</p> <p>Load: coordinated movements</p> <p><i>Grip: Eastern to semi-western</i></p> <p><i>Unit turn</i></p> <p><i>Preparation: Racquet above the wrist</i></p>	<p>Diagonal up</p> <p>Stances: Establish semi-open and introduce the open stance</p> <p><i>Ready position</i></p> <p><i>Lateral movement</i></p> <p><i>Split step</i></p> <p><i>Recovery: cross-over</i></p> <p><i>Diagonal movement</i></p> <p><i>Forward movement</i></p> <p>Stances: Closed, semi-open</p>	<p>20 balls cross-court past the service line in a row with shape and rotation (top spin) to both sides</p> <p>Understand offense and defense (slice)</p> <p><i>Moving forward → down the line</i></p> <p><i>Moving back → high cross-court</i></p> <p>Control/direct ball to zones of the court (7 out of 10) to each zone</p> <p>Topspin & slice</p> <p>Open court zone</p>
Backhand	<p>Consistent contact point</p> <p>Moving toward full extension at point of contact</p> <p>Set wrist in proper position</p> <p>Load: Coordinated movements</p> <p><i>Grip: Bottom hand: Continental; Top hand: Continental to eastern</i></p> <p><i>Unit turn</i></p> <p><i>Preparation: Racquet above the wrist</i></p>	<p>Timing of split step</p> <p>Increase scope of movement</p> <p>Speed of drills increase</p> <p><i>Lateral movement</i></p> <p><i>Split step</i></p> <p><i>Recovery step</i></p>	<p>Cross-court down the line, side to side (7 out of 10)</p> <p>Change direction of ball both down the line and cross-court during cooperative rally with partner</p> <p><i>Side to side (7 out of 10)</i></p>
Combo	<p>Smooth efficient grip change</p> <p><i>Transition grip between the forehand and backhand</i></p>	<p>Introduce leg drive (use of ground)</p> <p>Either platform or slide</p> <p><i>Balance</i></p> <p><i>Stable platform</i></p>	<p>Wide/body/T (split box into 3 zones and have to make 7 of 10)</p> <p>Slice serve and flat serve</p> <p><i>7 out of 10 to the correct box—each side</i></p>
Serve	<p>Synchronized upper-body mechanics with consistent toss from inside of the front leg</p> <p><i>Continental grip</i></p> <p><i>Coordinated service motion</i></p> <p><i>Consistent contact point</i></p>	<p>Outside leg behind the ball</p> <p>Fully execute grip change</p> <p>Outside leg behind the ball with a deeper load</p> <p><i>Grips</i></p> <p><i>Ready position</i></p> <p><i>Quick unit turn</i></p>	<p>Split step and backswing sync with speed of serve</p> <p>7 of 10—return cross-court on wide serves, return down middle on middle serves</p> <p><i>7 out of 10—return to each side</i></p>
Return	<p>Outside leg behind the ball</p> <p>Able to maintain firm wrist at contact</p> <p>Control racquet head</p> <p><i>Continental grip</i></p>	<p>Transitional footwork patterns</p> <p>Explosive split step</p> <p>Moving to volley and timing the step</p> <p><i>Split before contact</i></p>	<p>Short, deep, and angle volley—control and accuracy (7 out of 10)</p> <p><i>Volley to open court (7 out of 10)</i></p>
Volley			

Source: USTA

Finally, children must develop green ball proficiency for the same aspects of the game before transitioning to the yellow ball, as noted in the table below.

10 AND UNDER COMPETENCIES IN TRANSITION FROM GREEN BALL/78-FOOT COURT TO YELLOW BALL/78-FOOT COURT			
	Hands	Feet	Eyes and Mind
Forehand	<p>Weapon development: Racquet-head acceleration</p> <p>Develop forehand as a weapon</p> <p><i>Introduce racquet-head acceleration</i></p> <p><i>Consistent contact point</i></p> <p><i>Moving toward full extension at point of contact</i></p> <p><i>Unit turn—working on keeping non-dominant hand on racquet until the hitting shoulder rotates</i></p> <p><i>Wrist load/pre-stretch</i></p> <p><i>Load: Coordinated movements</i></p> <p><i>Grip: Eastern to semi-western</i></p> <p><i>Unit turn</i></p> <p><i>Preparation: Racquet above the wrist</i></p>	<p>Well-developed load in sync with unit turn</p> <p>Backward diagonal movement</p> <p>Integrate all three movements</p> <p>Stances: Able to execute all three</p> <p><i>Diagonal up</i></p> <p><i>Stances: Establish semi-open and introduce the open stance</i></p> <p><i>Ready position</i></p> <p><i>Lateral movement</i></p> <p><i>Split step</i></p> <p><i>Recovery: Cross-over</i></p> <p><i>Diagonal movement</i></p> <p><i>Forward movement</i></p> <p><i>Stances: Closed, semi-open</i></p>	<p>Speed</p> <p>Spin</p> <p>Height</p> <p>Depth</p> <p>Location</p> <p>Ball recognition: 7 of 10—random and 3-way forehand/backhand into appropriate zones</p> <p><i>20 balls cross-court past the service line in a row with shape and rotation (topspin) to both sides</i></p> <p><i>Understand offense and defense (slice)</i></p> <p><i>Moving forward → down the line</i></p> <p><i>Moving back → high cross-court</i></p> <p><i>Control/direct ball to zones of the court (7 out of 10) to each zone</i></p> <p><i>Topspin & slice</i></p> <p><i>Open court zone</i></p>
Backhand	<p>Weapon development: Racquet-head acceleration</p> <p>Change direction and shape</p> <p><i>Consistent contact point</i></p> <p><i>Moving toward full extension at point of contact</i></p> <p><i>Set wrist in proper position</i></p> <p><i>Load: Coordinated movements</i></p> <p><i>Grip: Bottom hand: Continental; Top hand: Continental to Eastern</i></p> <p><i>Unit turn</i></p> <p><i>Preparation: Racquet above the wrist</i></p>	<p>Drop step</p> <p>Move backward on diagonal, get behind the ball and establish the base to get hips moving back into the court</p> <p><i>Timing of split step</i></p> <p><i>Increase scope of movement</i></p> <p><i>Speed of drills increase</i></p> <p><i>Lateral movement</i></p> <p><i>Split step</i></p> <p><i>Recovery step</i></p>	<p>Game style</p> <p>Patterns to game style</p> <p>Attack and defend on both sides</p> <p>Random: Side to side with appropriate response to coach in corner—20 in a row</p> <p><i>Cross-court down the line, side to side (7 out of 10)</i></p> <p><i>Change direction of ball both down the line and cross-court during cooperative rally with partner</i></p> <p><i>Side to side (7 out of 10)</i></p>
Combo	<p>Able to position body in relation to ball and establish a contact point</p> <p>Create space between body and the ball</p> <p>Absorb power</p> <p><i>Smooth, efficient grip change</i></p> <p><i>Transition grip between forehand and backhand</i></p>	<p>Drop step</p> <p>Move backward on diagonal, get behind the ball and establish the base to get hips moving back into the court</p> <p><i>Timing of split step</i></p> <p><i>Increase scope of movement</i></p> <p><i>Speed of drills increase</i></p> <p><i>Lateral movement</i></p> <p><i>Split step</i></p> <p><i>Recovery step</i></p>	<p>Game style</p> <p>Patterns to game style</p> <p>Attack and defend on both sides</p> <p>Random: Side to side with appropriate response to coach in corner—20 in a row</p> <p><i>Cross-court down the line, side to side (7 out of 10)</i></p> <p><i>Change direction of ball both down the line and cross-court during cooperative rally with partner</i></p> <p><i>Side to side (7 out of 10)</i></p>

Chart continues on next page.

10 AND UNDER COMPETENCIES IN TRANSITION FROM GREEN BALL/78-FOOT COURT TO YELLOW BALL/78-FOOT COURT *cont.*

	Hands	Feet	Eyes and Mind
Serve	<ul style="list-style-type: none"> Integration of lower and upper body (leg drive) in sync Front foot up and over the baseline (leg drive) Introduce kick serve Elbow up to strong man with palm down <i>Synchronized upper body mechanics with consistent toss from inside of the front leg</i> <i>Continental grip</i> <i>Coordinated service motion</i> <i>Consistent contact point</i> 	<ul style="list-style-type: none"> Recovery: Re-establish base after making contact <i>Introduce leg drive (use of ground)</i> <i>Either platform or slide</i> <i>Balance</i> <i>Stable platform</i> 	<ul style="list-style-type: none"> Routine Adjust speed on first and second serves Accuracy: <ul style="list-style-type: none"> 1st Serve: 6 of 10 2nd Serve: 8 of 10 8 of 10 to backhand side of court <i>Wide/Body/T (split box into 3 zones and have to make 7 of 10)</i> <i>Slice serve and flat serve</i> <i>7 out of 10 to the correct box—each side</i>
Return	<ul style="list-style-type: none"> Be able to handle: High kick, wide slice, and hard, flat serve <i>Outside leg behind the ball</i> <i>Fully execute grip change</i> <i>Outside leg behind the ball with a deeper load</i> <i>Grips</i> <i>Ready Position</i> <i>Quick unit turn</i> 	<ul style="list-style-type: none"> Use of all three stances on both sides Recovery after contact Move around and hit forehand on second serve Backhand slice approach <i>Assimilate the 3 footwork movement patterns: back, lateral, forward</i> <i>Split step</i> 	<ul style="list-style-type: none"> Routines Return and attack Return 7 out of 10 to all three zones (short, deep cross-court, deep down the line) <i>Split step and backswing sync with speed of serve</i> <i>7 of 10—return cross-court on wide serves, return down middle on middle serves</i> <i>7 out of 10—return to each side</i>
Volley	<ul style="list-style-type: none"> Swing volley Low and high volleys with different speed and spin <i>Outside leg behind the ball</i> <i>Able to maintain firm wrist at contact</i> <i>Control racquet head</i> <i>Continental grip</i> 	<ul style="list-style-type: none"> <i>Transitional footwork patterns</i> <i>Explosive split step</i> <i>Moving to volley and timing the step</i> <i>Split before contact</i> 	<ul style="list-style-type: none"> Volley sequence: deep to short (7 out of 10) Swing volley (7 out of 10) <i>Short, deep, and angle volley—control accuracy (7 out of 10)</i> <i>Volley to open court (7 out of 10)</i>

See also: www.usta.com/about-usta/player-development/10_and_under_tennis_competencies_instruction

Source: USTA

One primary purpose of 10 and Under Tennis is to better allow players to emerge with solid fundamentals. As contrasted with the yellow ball for young children, the 10 and Under Tennis format allows the child to become well versed in the parameters of grips, preparation, swing path, and ball placement. If these competencies are developed at each level, they do not need to be re-learned later on. Unfortunately, the trend today is that many teenagers need to spend considerable time addressing technical flaws. Indeed, in reviewing more than 1,000 players at various USTA Certified

Regional Training Centers during the past year, approximately 75 percent of players had technical flaws that impeded their progress.⁸⁵ This means that considerable time needed to be spent in a deliberate practice/closed play setting to correct the flaws. Otherwise, the player could not advance optimally to his or her skill set in tennis.

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