

F COACHES REVIEW



Issue 12 SEPTEMBER 1997

WELCOME TO COACHES REVIEW!

Welcome to issue 12 of ITF Coaches Review which features articles from the USA, Germany, Holland, Chile, Canada, Switzerland, Ireland and Zimbabwe. The subjects covered include a contribution from Dr. Paul Roetert from the USTA on the importance of the split-step in high level tennis and the continuation of Richard Schonborn's article on the structure of technical training. There is also a practical article by Babette Pluim from Holland on ten ways to prevent lower back problems for tennis players. Eduardo Aspillaga from Chile presents the educational benefits of competitive tennis for junior players. The differences between good players and great players are illustrated by Josef Brabenec of Canada and Dr. Svatopluk Stojan of Switzerland. David Wilson from Ireland explains ½ court practice drills, while Feisal Hassan from Zimbabwe outlines what makes a good coach. We also include a communication skills checklist which covers the basic aspects of communication for tennis coaches.

This issue our section on "What tennis research tell us about...?" is dedicated to anticipation and visual search in tennis. This is a very interesting topic since much of the results obtained in the studies have a direct application to daily training.

The section "Tennis on the web" covers the global presence of tennis on the internet with an article that reports on new web sites related to tennis including international organisations, national associations and international tournaments.

In our section "Recommended Books", we present information on several interesting new tennis books that cover a variety of topics at different levels. As stated in our last issue the 10th ITF Worldwide Coaches Workshop will take place in Puerto Vallarta, Mexico from 17 to 24 November 1997. The programme for the workshop is shown on the back page of this issue.

Some of our readers will be interested to learn that the ITF is prepared to consider offering small research grants to those researchers interested in conducting scientific studies on tennis. For further information, please contact either the ITF Development Department or the ITF Research Officer.

We hope that the articles in Coaches Review continue to generate a lot of discussion among coaches around the world. If some of our readers are interested in commenting on any of the articles published in Coaches Review we would be happy to receive your letters and if we feel your comments are of interest, we may publish some letters in future issues.

Once again we would like to thank all the coaches who have contributed articles for this issue of ITF Coaches Review. If you have any material that you deem relevant and worthy of inclusion in a future issue, please forward it to us for consideration.

We do hope you enjoy our 12th issue of Coaches Review.

Dave Miley
Manager, Development

Miguel Crespo Research Officer

THE STRUCTURE OF TECHNICAL TRAINING - PRESENTED IN A DIFFERENT WAY (II)

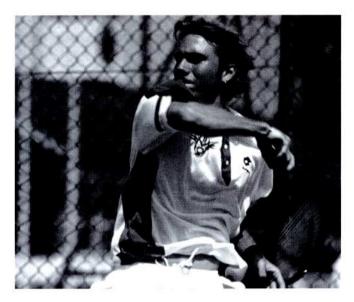
by Richard Schonborn (Germany)

Continued from issue 11: The author emphasises the importance of structuring the technical training in the areas that define the particular characteristics of the outstanding champions. He states that the foundations for top tennis performance are highly complex and involve many factors, thus the technical training needs to be goal and task oriented.

To put it more precisely: Thanks to the areas mentioned above, these players can fully utilise, and thus optimally

apply, the entire range of their individual technical skills (which can vary from one player to another).

The conclusions to be drawn from this should be obvious to all of us: from the very beginning we should ensure that children and junior players are gradually and systematically trained in all motor, physical, technical, tactical, psychological and other areas. At the same time, all these areas should be immediately connected with the simultaneously developing tennis technique. That means:



creative training that replicates real match play situations, easy ones at first but more and more complicated as time goes on. It also means using fewer hitting-drills where the teacher feeds from the basket. Instead, from the very beginning the exercises should involve a teacher-player or a player-player inter-action. Situations should be successfully resolved according to the player's technical capabilities at a given stage. Moreover, the main focus should be on the end result, rather than on the way of executing the tasks. The repeated achieving of the intended goal is the best confirmation of a correct technical execution.

Only in case of specific difficult problems, due to blatant technical flaws, should those technical details be corrected through stroking-motion oriented teaching or drilling for a certain period of time. The overall training approach should, nonetheless, continue being goal and task-oriented.

In these stages we are referring to the first two levels of development - learning and technique acquisition training - as well as supplementary training, in which the above mentioned physical, tactical and psychological areas are gradually developed, according to the player's age and playing level.

I would like to emphasise once again that learning, technique acquisition training and supplementary training should not take place independently from each other. Quite the contrary, they must be closely connected with each other, time after time. The human body is a single entity. Accordingly, it works best as such, or it does not work at all. Even at the beginner level, the quality of the technical development depends entirely on the player's co-ordination skills and speed, as well as on his mental disposition, motivation, goal setting, etc., which are developed prior and during the technique training.

On the other hand, the successful implementation of technique at all levels depends, other than on the above mentioned characteristics, on the player's physical conditioning, in terms of strength, stamina, muscle flexibility, balanced muscle frame, health status and overall body condition, as well as on other psychological features,

such as mental toughness, willpower, self-confidence, dedication, ambition, fighting spirit, self-discipline, etc.

All of these factors do not fall from heaven. They must be addressed and developed as part and parcel of the daily training work.

The ultimate objective is the so called "complex training", in which, practically, nothing but difficult real match situations are specifically and systematically created, in order to achieve perfection, according to the player's individual potential, in the physical, mental and tactical areas, as well as a sort of virtuosity, as far as tennis technique is concerned.

The one and only goal of such a continued step-by-step development must be to increase each player's general and specific performance capabilities, in order to reach the individual maximum results. In the final analysis, performance is the only thing that matters. Many people are capable of playing "nice" or technically perfect tennis, but that does not account for much in the final score.

For instance, Muster, Courier, Chang, Seles, Sanchez-Vicario, and many others, do not play "nicely" at all. But they achieve top performances thanks to the characteristics repeatedly mentioned above. They are all uncompromising fighters, who never give up. No situation is desperate for them, even if it seems impossible. They make the impossible possible. They see the most difficult situations not as threats, but as challenges. They can handle all disappointments. Time after time, they manage to re-focus and to concentrate exclusively on the point being played, to motivate themselves again and again. They collect points like bees collect honey and have no second thoughts about trying to grab the most distant and most difficult to reach fruits. Thanks to their previously discussed characteristics, they are capable of it. That is the reason why they are so successful.

Of course, such characteristics and features are also shared by the successful "technical perfectionists", such as, for instance, Stich, Sampras, Becker, Edberg, etc. Otherwise, they could not have been that successful.

On Table 2, I have tried to represent a systematic methodology for overall sport development. In so doing, I have expanded or modified, according to my own suggestions, the models developed by Roth (unpublished) and by K. Willimczik (Sporttechnisches Lernen und Techniktraining BISW, Volume 76, 1991).

In my opinion, such a methodological structure could provide the appropriate guidelines for the development of high-performing male or female tennis players. I would like to provide a brief explanation for the suggested methodology.

In tennis practice, we speak almost exclusively of "training", when we refer to the acquisition of a technique (at beginner stage), or to the subsequent performance-oriented perfecting of it. In the theory of training Science,

however, there are some clear-cut fundamental differences. Whereas in motor-learning the problem of the optimum assimilation of a given technique is taken out of the complexity that characterises sports performance, in technique training (especially for high-performance sports) it is precisely the complexity of training that is made the starting point for all further development efforts (K.Willimczik).

The learning of technique (for beginners and advanced players in the first stage) is almost an exclusive task for the central nervous system, in which the so called "engrams" (stable neuronal connections or loops) are formed. This concerns primarily the co-ordination and speed areas, both of which are governed by the central nervous system, and to a lesser extent the energy-related areas. In other words: it is primarily a matter of motor learning processes, of individual technique enhancement, or of "acquiring and perfecting of the internal control capabilities, resulting in the improvement of a movement technique, related to the individual" (K.Willimczik). This takes place on the basis of information processing.

In the second stage (final refining and automation), as well as in the subsequent stage of virtuosity, the importance of the energy-related (physical conditioning) and tactical areas increases more and more.

In these stages, the learned technique (the existing stored engrams) is more and more often applied in a goal-oriented manner, with the exclusive objective of increasing the performance, in the context of a "super-individual" (composite) optimum utilisation of skills, or, on the other

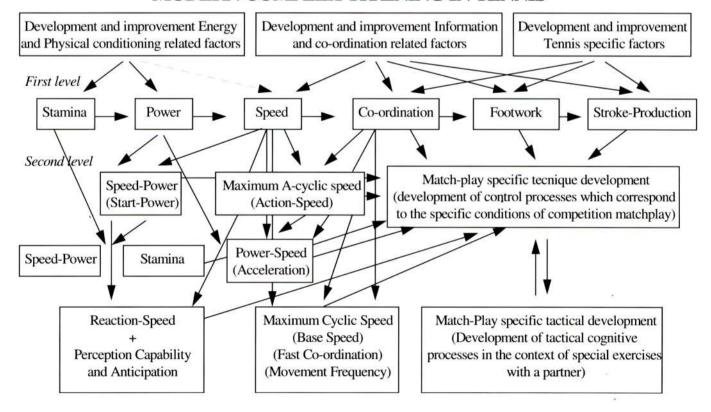
hand, "in order to improve a generally valid solution for a movement-related task" (K.Willimczik).

In training Science, the term "training" is especially used in connection with performance enhancement. Constantly matching the development of the player's physical and tactical capabilities, both the systematic practice under varying situations and at increasing levels of stress, in which the existing learned technique is stabilised and consolidated in relation to the situation (technique acquisition training), as well as the subsequent technique implementation training serve the purpose of increasing individual performance. At that stage, adaptation processes are mainly involved.

It must be underlined that, in this symbiosis too, both areas, namely, technique (and tactical) training, on the one hand, and physical conditioning training, on the other hand, rest upon different physiological and biochemical foundations. The first is a matter for the central nervous system (motor learning processes), the second (with the exception of coordination training and, for the most part, speed training, both of which also belong to the central nervous system area) has to do with super-compensation.

The controls for technique training are not initiated by stress and fatigue. They cannot take place on the basis of super-compensation. These different objectives result also in different drills or training forms, as well as in different contents, stress-loads, intensities, volumes, break and load intervals, etc. The question now is to fill up with details each one of the different stages. I shall try to accomplish that in a new book on which I am presently working.

MODERN COMPLEX TRAINING IN TENNIS



THE SPLIT STEP

by Paul Roetert Ph.D.

Administrator of Sport Science for the U.S. Tennis Association. This article first appeared in Tennismatch issue 49, August 1995

We've all heard that executing a split-step is all-important on the return of serve or serve-and-volley so you can quickly react to the ball. But the use of the split step is much more important than just in those situations. Top players perform a split-step before every stroke. This helps in establishing a base of support so you can get to the next shot in the fastest and most balanced way.

A split step is like the unweighting technique skiers use to turn. When you quickly bend your knees, you take the weight off your feet for a split second. Try it on your bathroom scale. Stand up straight on the scale and see how much you weigh. Then lower yourself quickly by bending your knees. Did you see what happened to the reading on the scale? The needle went down first, while you were bending your knees (unweighting). Unweighting lasts for only the split second our body is falling through the air. (If you are quick enough, even the weight of our feet

would have been absent on the scale!). When you stopped bending your knees, the weight on the scale jumped up, even above your actual weight.

This concept of unweighting can help your movement skills tremendously in tennis. By quickly decreasing and increasing your force against the ground, you can get balanced and then explode to the next shot in any direction as quickly and forcefully as possible.

To perform the split step properly your feet should be about shoulder-width apart, your weight on the balls of your feet, and your upper body leaning slightly forward. Make sure you keep your racquet in front of your body. Then quickly bend your knees to get on balance and prepared to move in any direction. Some players even take a slight hop off the ground. When they land on the balls of their feet, they're coiled to sprint for the next shot.

Watch the top pros. They take a split step before every

stroke, just as the opponent initiates the forward swing. This helps in establishing a base of support so that they can quickly react to the next shot.

In an average point on a hard court, you have to change directions three to four times in about five seconds. It is critical during those times to be as balanced as possible, to keep your center of gravity over your base of support. When you lean forward or lunge for a wide shot, your center of gravity moves in that direction, making it impossible to move until you center yourself over your feet again. The trick is to get to the ball as

quickly as possible and still be balanced enough to execute the shot properly. Performing a split step helps you get balanced before moving to your next shot. And keeping your body and center of balance under control while you are moving is the key to performing high-level tennis.

Don't spend too much time in the split step. Don't take a big hop and land flat on your feet. The split step should look like just a slight hesitation. Be light on your toes, bend your knees slightly and keep your upper body balanced. This will help you explode to the next shot. So use the split step properly and you will explode to the next level.



TEN WAYS TO PREVENT LOWER BACK PROBLEMS

by Babette Pluim

Medical advisor for the Royal Dutch Lawn Tennis Association

LOWER back pain is a relatively common complaint among both athletes and non-athletes. It will be experienced by more than half of the general population during their lifetime.

A survey of 143 players on the ATP Tour revealed that 38% missed at least one tournament because of lower back problems. The main symptoms can be either stiffness or pain. This can arise not only after vigorous activity, but also after standing or sitting for a long time. The pain frequently extends to the buttocks, down the leg and even

as far as the knee. There can be many different causes of the pain, but the main reasons are muscle dysfunction (muscles too tight or too weak) or disc problems. I would like to discuss ways to prevent lower back problems caused by muscle dysfunction since disc problems usually require more specialised therapy from a doctor.

Stretching

1. Elongation: There is usually a direct relationship between back pain and muscle tightness. Stretching and relaxing is therefore the best thing you can do to prevent back pain. Picture 5 shows an excellent and easy-to-do exercise to lengthen your back muscles.

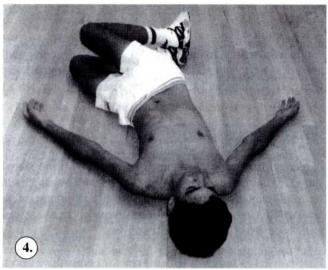
- **2. Mobility**: Here is another exercise. This one is designed to improve the flexibility of your lower back. Some people call this exercise "the cat" since you should try to arch your back the way a cat does (picture 1).
- **3. Rotation**: Tennis involves a lot of twisting and turning. The following exercise will make your lower back more supple (picture 4).
- **4. Posture**: Many tennis players have poor posture. They stand with round shoulders and concave back. There are three ways to improve this condition: strengthening back muscles, strengthening stomach muscles and stretching the muscles which connect your pelvis and thigh (quadriceps, hamstrings and iliopsoas). Picture 6 shows an exercise to stretch the iliopsoas.

Strengthening

- **5. Weight training:** More and more tennis players are doing this. A good thing if you have received instruction on exactly what to do and what not to do. Be particularly careful when you try to lift dead weights.
- **6.** Exercise for the back: A good serve requires strong back muscles. Conversely, weak back muscles can actually lead to injury on certain service motions (eg. an American twist or kick serve). Picture 2 is a good exercise to strengthen your back.
- **7. Exercises for the stomach:** Crunches are the best. See picture 3. The exercise is most efficient when you keep your ankles crossed and your feet off the floor.

General

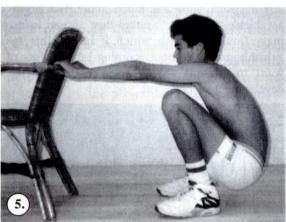
- **8. Jogging**: Avoid hard tracks and pavements. If you must run often on surfaces which are too hard, you will increase the shocks to your back. For those of you who already have lower back problems, try biking or aquarunning.
- **9. Shoes and braces:** Wear shoes which are well-cushioned and well-supported in the heel. Cushioning is particularly important if you play mostly on hard courts. For those with back troubles already, try an elastic back brace, as some of the top players do.
- **10.** Warm-up before playing: Do at least five minutes of stretching exercises before you play, every time. Be especially careful if you have not played for a long time, have been sick, or have been travelling in a car or plane.

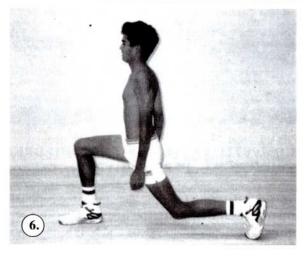












COMPETITIVE TENNIS FOR CHILDREN, AN EDUCATIONAL PERSPECTIVE

by Eduardo Aspillaga Fontaine (Chile)

INTRODUCTION

In the different workshops that I have participated for my education as a tennis coach, I had the opportunity to listen to, present and develop different topics related to coaching. Using different styles and points of view, knowledgeable and innovative experts have presented their knowledge on subjects such as advanced teaching methods, the latest training systems, the findings on physical conditioning, psychology, nutrition, hydration, etc.

We believe in the importance of our work, so we continually search for ways to do it better. But this will not always be enough. I feel there is an important gap which is fundamental to the very essence of our job as coaches.

WHAT'S TENNIS ABOUT?

A recreational game? A competitive sport? A professional show? What makes the sport of tennis grow? What should we professionals emphasise? I think it is important to answer this and other questions in order to view our profession from an global perspective:

Firstly, what is tennis? It is a game, a competitive sport, a professional show and much more. But, above all, it is a valuable "means to", rather than an end in itself. It's a marvellous tool with which it is possible to achieve valuable goals. Without scorning other points of view, I want to present a very transcendent focus for the development of our sport.



COMPETITIVE TENNIS FOR CHILDREN, AN EDUCATIONAL PERSPECTIVE.

Traditional tennis teaching separates recreational tennis from competitive tennis. The first provides: fun, good use of free time, physical hygiene and health, and a good way to improve social interaction. The second offers the chance to be a champion, to be noticed, to win money and to improve oneself (especially in countries with no sporting history and a hunger for success).

However, there is a third element which makes competitive tennis for youngsters valuable - its use as an educational tool - by using competition as a vehicle to achieve multiple goals in the development of children. What child who loves tennis will not dream of being Sampras, Aggasi, Muster or Ríos?, What coach will not want to develop a champion?

How many young tennis players start to follow the path of their idols? How many hours of dedication, effort and sweat? How many resources are invested in this pursuit?. But, how many of them will have any competitive success? How many of them will make it as professionals? What will the rest get? If we do not provide an adequate answer to these questions we will be condemning to failure the majority of players before they begin, and we will be losing the invaluable opportunity to prepare and educate them for "the match of life".

- 1- Competitive tennis teaches players to set goals and to work to achieve them. Children set their own goals based on their interests and motivation. They learn to manage their time, by organising their spare time and their school obligations efficiently (as a general rule, good sportsmen are also good at school).
- 2- Competitive tennis teaches the value of commitment. Children have to sacrifice other activities eg holidays and

recreation time in order to improve their tennis. They have to CHOOSE to "work" ahead of other attractive pastimes.

3- Competitive tennis teaches players to respect the rules and to confront stress. Not too many things have clear and written rules. You have to play to the rules and to accept the consequences although they may often be negative. It is difficult when a child realises that the ball he expected to bounce out has bounced on the line and thus he does not win. The player learns the importance of being fair. The fear of losing creates tension that children have to confront. This tension is a great way to prepare them to

face the stresses in other areas of life.

4- Competitive tennis teaches players how to win and how to lose. A balanced reaction to defeat and moderation in success, are some of the qualities that are developed through experience and participation in tournaments. Competition also allows players to experience success and

failure in short periods of time and relate them to the work performed.

5- Competitive tennis teaches one to socialise. Tournaments are played by children from a wide variety of backgrounds; together they share their experiences and learn from one another.

6- Competitive tennis teaches players to take care of their bodies and to acquire hygienic habits. An understanding of how to eat properly, how to recuperate, how to be active or to relax, how to stay in good shape, is built up through competition.

This knowledge will overlap with other activities in the players' lives, contributing to the development of better and more successful people. Through tennis, all our pupils can receive valuable lessons.

Our challenge as performance coaches is to prepare children with and through tennis for "the match of life". As a bonus, we may produce a tennis champion or two!.

GREAT PLAYER or only a GOOD PLAYER?

by Josef Brabenec (former National Coach - Canada) & Dr. Svatopluk Stojan (former National Coach - Switzerland)

The expression so often used "GREAT PLAYER" is a relative one. We understand top 50 ATP ranked men and top 20 WTA ranked women in the world as great players. The rest of all players ranked in the world are very good players. There are thousands of good tournament players and millions of club and recreational players. Ivan Lendl, John McEnroe, Jimmy Connors, Pete Sampras, Stephan Edberg, Martina Navratilova, Boris Becker, Chris Evert, Billie Jean King, Steffi Graf, Monica Seles have all been great players.

Our mutual friend Frank, ranked NR. 67 in his country, NR. 8 in his county has always been "only" a good player but in the small club where he plays and where he has been the champion for the last 6 years, he has been eyed by many youngsters as a "great player". He has been by far the best they have seen every day for the last 3-4 years.

Thus there are many more thousands of GREAT Players around the world, who are practically unknown, but who, at the same time, may have been the most influential element in attracting thousands of youngsters to the sport. They have been the role model that the local kids will follow. The status is in the eye and in the understanding of the beholder.

What do the GREAT PLAYERS have in common with the other good players and how do they differ from all other players? All good tournament players usually have sound stroke technique, good physical condition and are good strategists. GREAT PLAYERS naturally have all the above, but on top they possess the so called intangible features-a certain superior inborn quality, mental toughness and highly competitive composure in crucial moments. With the score 5-4, 30-30 a great player will usually get his first serve in, while a good player will often deliver a second serve and a club player is prone to doublefault.

Classic example was in the singles finals of US Open 1996, Sampras versus Alex Corretja. Sampras at the brink of total exhaustion serving at 6:6 in the tiebreaker of the fifth set misses his first serve. Visibly at the very end of all his physical strength Pete mobilised all his available mental forces and hits an incredible ace wide on his SECOND SERVE. Corretja looks at his opponent in total disbelief, goes to serve and doublefaults to finish one of the most dramatic matches in the history of the game. Was it luck or the sign of a great player? Partially both, however without the will to do it, it would not have happened.

When you observe great players and good players in practice there is often no visible difference in the way they hit the ball. It will however show in crucial match situations. The optimal stroke efficiency is governed by neuro-muscular coordination which depends directly on player's mental disposition in a given match, particularly self-projection, confidence and the experience of being there before. Great players thrive in such situations. Other players very often fold in such conditions. Millions of players around the world can hit the ball well. Great players are capable of doing that consistently WHEN IT COUNTS. It proves that the best looking strokes (text-book shots) have never been a decisive factor in a competitive match if they are not backed-up by a positive and confident attitude by the player during the execution. A match atmosphere may bring out the best or the worst in a player by distorting the player's coordination which is essential for most efficient stroke execution.

According to world class players only 20-25% of the player's performance during a competitive match depends on stroke technique. The remaining 75-80% depend on the player's state of mind namely confidence during a match. In the case of relative equality in stroke technique, the more confident and therefore mentally stronger player will always be victorious.

Everybody is born with certain limits to their abilities, but equally everybody has reserves to be tapped and developed. It is obvious that when playing competitive tennis the MIND (confidence, desire, decision making) the BODY (fitness, coordination, technique) and the EMOTIONS (feelings, behaviour) must work in harmony to produce optimal results. The great players use masterfully the time between points and games to enhance their positive and often domineering behaviour during the match, while the majority of so called good players will constantly fight with themselves.

When evaluating young players with potential, their mental attributes such as desire, determination, discipline, resistance to frustration are very important for their future development. Beware that some of these mental traits may show relatively late (15-16 years of age). Basically the great players handle themselves with respect and understanding in all crucial match situations which leaves them with much more energy and much more focused on solving problems caused by their opponents. There is one irrevocable fact the truly great players have been born with an exceptional gift in certain human abilities which cannot be achieved by any training or exercise.



One common mental trait of all great players is their deep love of the sport. It is absolutely essential. The other exceptional personal qualities are purely individual. Take for example Andre Agassi's superior reaction combined with superfast eye-hand coordination or Pete Sampras' will to win in spite of obvious physical pain or illness. Watch the facial expression and ferocity of each stroke underlining

the killer instinct of Monica Seles. John McEnroe's trademark was his domineering and superior behaviour mixed with incredible anticipation and courage for relentless attack, which was in sharp contrast with Ivan Lendl's disciplined game where each stroke, like a move in chess, was a result of a masterful game plan. Then there is the unbelievable simplicity in Ivanisevic's game (toss the ball and hit an ace!). Service efficiency of that calibre is a gift - not a learned skill. What a difference to Thomas Muster's labour of love and painful determination winning points strictly with hard work

and often with sheer will- power. Grace and joy radiating from every move of Steffi Graf on the court can not be taught.

All the above have been fortunate in receiving hereditory gifts of an exceptional nature. Without such a gift nobody can become a truly great player. It proves that good and possibly even very good players can BE MADE, but excellent and great players ARE BORN and MADE.

1/2 COURT PRACTICE DRILLS

by David Wilson (Ireland)

The pressure of limited court space at tournaments means that travelling players are regularly limited to training on the half-court. This can obviously make it difficult to organise a constructive and dynamic practice session and often results in monotonous and repetitive patterns and drills. The following ideas may therefore prove useful for coaches who find themselves working in limited space. This list might also be given to junior players to use while practising without a coach. All points can be played on the half-court either straight or crosscourt using table-tennis scoring and service rotation.

- 1. **Both back anything goes**. Both players start on the baseline, either player feeds a reasonable ball and then the point is played out. A minimum rally length can be set to help maintain a suitable level of consistency.
- 2. **Feed and approach**. Both players start on the baseline, one player feeds a reasonable ball and immediately approaches behind it.
- 3. **Return and approach**. Both players start on the baseline, one player feeds a reasonable ball, the other player returns it and must approach immediately.
- 4. Double approach. Both players start on the baseline,

one player feeds a reasonable ball and approaches behind it, the receiver returns this feed and also approaches straight away.

- 5. Both up anything goes. Both players start on the service line, either player feeds a reasonable ball (for his opponent to volley) and then the point is played out. The rules can be altered to suit the standard (e.g.: minimum rally length, only volleys allowed, no lobs, etc.).
- 6. Control the net. One player starts at the net and feeds a reasonable ball to his opponent on the baseline and then the point is played out. Using volleyball scoring points can only be won by the player at the net and positions are switched if the baseline player wins a point.
- 7. **Smash attack**. One player starts on the baseline, feeds a smash to his opponent at the net and then the point is played out. As with drill 6, points can only be won by the player at the net and positions are switched if the baseline player wins the point.
- 8. **Aggressive groundstrokes**. Both players start on the baseline, either player feeds a reasonable ball and then the point is played out. All shots must be hit from inside the baseline.

- 9. **Serve and volley**. Full serve and volley points are played on the half court. Service placement may need to be restricted in order to avoid interfering with players on the other half of the court.
- 10. **Return and volley**. As above, but the server stays back and the receiver must approach behind the return.
- 11. **Restricted groundstrokes**. Both players start on the baseline, either player feeds a reasonable ball and then the point is played out. Groundstrokes can be restricted in any number of ways (e.g.: forehands only, backhands only, alternate shots, topspin only, underspin only, alternate spins etc.).
- 12. **Approach simulation**. Both players start on the baseline and one player starts to run towards the net. As he reaches the service line his opponent feeds any shot he likes (e.g.: low and soft, hard at the body, lob etc.) and then the point is played out.

- 13. **Depth challenge**. Both players start on the baseline, or with one at the net and one on the baseline. All shots must be hit beyond the service line.
- 14. Quick feet. A co-operative drill with one player at the net and the other on the baseline, where the aim is to keep the ball in play as long as possible. The baseline player must alternate groundstrokes and volleys, moving forward quickly to (at least) the service line after his groundstroke for a volley and immediately backing up in order to hit the next groundstroke. The volleyer acts as a feeder making each ball reachable for the baseline player.
- 15. **Smash and volley**. Another co-operative drill with both players trying to maintain the pattern for as long as possible. The baseline player alternates lobs with low short balls. The net player must therefore back-up to hit a smash, immediately move forward for a low volley and then back for another smash etc.

WHAT MAKES A GOOD COACH?

by Feisal Hassan (Zimbabwe)

A COACH should be a Committed, Organised, Articulate, Caring, Human being. This little pneumonic successfully captures the qualities needed to be a successful coach.

Without **commitment**, the players in your charge will never learn the virtue of "digging deep". It will be all too easy to give up when things are not going well. Many of us, I am sure, can recall from our school days the impact made by a teacher who showed great commitment to his job, whether it was in the classroom or on the playing fields. This was the teacher for whom you would do that extra reading and run that extra 500 yards without complaining because you felt that, if the roles were reversed, he would do the same for you. Good coaches continue to learn and improve their coaching skills in the areas of technique, physical and mental training, and equipment. Today's coach should no longer confine themselves to the court. They should regularly attend conferences, meetings, conventions and speciality courses.

Organization implies planning ahead. There is nothing worse than attending practices which have not been thought out. When the coach is groping for ideas as to what to do next; when there is no flow or logical sequence in the activities; when the equipment is inadequate or unsuitable; when activities are meaningless and bear no relevance to the match situation, no one benefits. Such sessions are a waste of everyone's time and can easily be avoided with a little proactive planning.

The ability to communicate at an appropriate level is probably the hallmark of a quality teacher. It is of little value having great thoughts if you can not **articulate** them in order to share them with your charges. Many very

knowledgeable sportsmen have failed to make the transition to coaching, not because they do not know what to do, but because they do not know how to effectively transmit their knowledge to the players they coach. Coaches need to know how players learn, different methods of learning, the players' style of learning, as well as appropriate teaching strategies for various ages.

For a coach to be really successful he has to fully understand his player(s). He needs to know them as individuals as much as possible. In particular, when dealing with young athletes the coach must remember that they do have a life away from the sport. A world where family, friends, hobbies, etc. are important. It is essential for players to feel secure in their environment and it is incumbent upon the coach to provide the right balance of security without complacency. One way in which this relationship is built is by spending time together away from the "work" environment. Thus a deeper, more personal relationship develops and the coach can show his more caring, human side.



TENNIS ON THE INTERNET

by Miguel Crespo (ITF)

In our last issue of Coaches Review we spoke about the ITF's global presence on the Internet. Remember that the ITF's web site is called ITF Online. This web site consists of eight sections including the ITF flagship events, the Davis Cup by NEC and KB Fed Cup. The ITF's web site is on http://www.itftennis.com.

In this article we are going to give you information on new web sites related to tennis. These sites include international organisations, national associations and international tournaments.

NATIONAL AND REGIONAL ASSOCIATIONS

National and Regional Tennis Associations all over the world are increasingly joining the internet. They present their information in different ways and they act not only as a source of information themselves but also as a link to other tennis sites.

Tennis Australia has its web site at: http://www.tennisaus.com.au/ and it consists of the following sections: Participation, industry news, player info, media releases, junior tennis, women's tennis, states/territories, annual report, events, Australian open, Davis Cup and Fed Cup.

The United States Tennis Association has its web site on http://www.usta.com. This site consists ofn four sections which are: The USTA, Membership & Benefits, What's News, and The US Open.

The Danish Tennis Association has its web site on http://www.danskennisforbund.dk, and its sections are: infosite, ranking lists and tennis links amongst other.

The French Tennis Federation has its web site at: http://www.fft.fr/.

INTERNATIONAL ORGANIZATIONS

The ATP tour on http://www.atptour.com, has the following sections: About the ATP Tour, Resort at Ponte Vedra Beach, Florida, Mercedes Super 9 & World Championships, Tennis Fan Fare, NewsLine, Top Tennis Players, Tennis Publications, Pro Shop, Calendar and U.S. Broadcast Schedule, Rankings, Results, Across the Net.

The Corel WTA Tour on http://www.corelwtatour.com. includes the following sections: Player bios, results, tickets and scheduling info, things to see, stats, vote for your favourite player, schedule, match notes, the news.

TOURNAMENTS

Some tournaments also have their own web site. As we wrote in our previous article, the Davis Cup by NEC has

its official web site at http://www.daviscup.org/ while the KB Fed Cup has its site at http://www.itftennis.com/events/fedcup.html

The 1997 Australian Open has its web site at: http://www.ausopen.org/ which includes the following sections: General Information & History, Players, Scores & Stats, Daily Report, High Tech & Games, and Quick Index. Next year's Australian Open has its official site at http://terminator.squirrel.com.au/tennisnet/austopen/. It consists of the following sections: information guide, general information and ticket prizes, 1997 men's and women's draws, and other links with tennis organizations.



The French Open had its site on http://www.frenchopen.org, and included the following sections: Sign the Guest Book, Comments and Questions, Information & History (Tickets Events & Schedules, Merchandise, Program Articles, History, Site Map), Players, Scores & Stats (Match Schedules, Current Scores, Daily Results, Draws), Daily Report (Newswire, Daily Features, Shots of the Day, Player Interviews), High Tech & Games (Games, Web Site, Radar Gun, Tournament Network, Match Update Centre), Quick Index, and French Version.

Wimbledon has its web site at http://www.wimbledon.org, while the Masters has its web site at http://www.masters.org. The US Open also has a web site. It consists of the following sections: information, on-site, history, technology, screening room, US Open images, US Open report, players' diary. This web site is at http://www.usopen.org

Information on the web regarding other tournaments can be contacted through http://www.tennisserver.com.

As you may notice, there is a lot to look up and read about on tennis on the web. Since there is still a lot more that we have not yet mentioned, we will continue with these "tennis on the internet" articles in our next issues.

WHAT TENNIS RESEARCH TELLS US ABOUT... ANTICIPATION AND VISUAL SEARCH

compiled and summarised by Miguel Crespo (ITF)

Below are summarised a series of articles on tennis anticipation and visual search which have appeared in sport scientific publications. Coaches interested in obtaining more information from these articles can find them using the relevant references.

Anticipation in junior tennis players

In this study the author reported that expert players are able to "read" such things as: angle of the racquet face, travelling arc of racket head, line of shoulders, weight transfer, and ball toss location. The author concludes that the studies systematically showed faster information processing and decision times for experts; experts are also more proficient (greater accuracy, greater number of correct responses) than novices. Expertise leads to regularised structure and sequence of processing variables. Moreover, choice confirmation seems absent in experts, whereas beginners come back on already processed cues.

Day, J.L. (1980). Anticipation in junior tennis players. In J.L.Groppel & R. Sears (Eds.), Proceeding of the International Symposium on the Effective Teaching of Racquet Sports (pp.107-116). Champaing, Ill. University of Illinois.



Anticipatory timing of beginners and intermediate tennis players

The results of this study on anticipatory timing showed that beginners and intermediate tennis players experienced very little success in predicting latitude, longitude, or exact ball placement in two restricted viewing conditions: 10 ms (prior), and 0 ms (contact). According to these authors, such findings suggest that players were, at these levels, unable to identify relevant cues emitted by the server. Similar results were also found be Jones and Miles (1978).

Use of advanced cues in predicting the flight of a lawn tennis ball. **Journal of Movement Studies**, 4, 231-235.

Isaacs, L.D. & Finch, A.E. (1983). Anticipatory timing of beginning and intermediate tennis players. **Perceptual and motor skills**, 57, 451-454.

Analysis of the visual indexes in the return of serve

An analysis was made of the different visual patterns of expert and novice tennis players preparing to return a tennis serve. Sixteen-mm films were used for testing purposes; flat, top-spin, and sliced serves delivered by a right-handed and a left-handed server were presented to subjects. For scanpath analysis, the serve was divided into three phases: ritual, preparatory and execution phase. When computing the number of exchanges occurring between two locations during each of these phases, it was found that: (a) experts look around the head and the shoulder/trunk complex (general body position) of the server more frequently than do novices, (b) there seems to be little difference during the preparatory phase since both experts and novice centre their ocular fixations around the ball or its expected position, and (c) during the execution of the serve, fixation sequences of experts are linked to cues originating from the racquet and the arm holding the racquet, whereas novices organise their sequences by using a greater number of cues. During this phase, experts terminate their visual search on the racquet at the moment of impact, whereas beginners frequently prolong their processing by following the ball trajectory after impact. Privileged cues (upper limb, anticipated ball placement) emphasise the fact that experts make use of cues relying or the interpretative function of their visual system.

Goulet, Fleury, Bard, Yerlès, Michaud, & Lemire (1988). Analyses des indices visuels prélevés en réception de service au tennis. Canadian Journal of Sport Sciences, 13, 79-87.

Skill level, peripheral vision and tennis volleying performance

The present study was an attempt to investigate the relationships between skill level, peripheral vision and tennis volleying performance. Subjects were tennis players of three different ability levels. A tennis volleying task performed by all subjects under conditions of full and occluded visual feedback, yielded measures of accuracy and control at two different ball speeds. Results indicated that, contrary to recent studies of one-handed catching, vision is not a pre-requisite for successful arm and positioning during volleyball. This suggests that with regular training a player may develop a more acute sensibility to the perceptive signals he receives when

positioning the racquet for the volley thus relying less on watching the actual flight of the ball (visual feedback).

W. Davids, D.R.De Palmer, & G. J. P. Savelsbergh (1989). Skill level, peripheal vision and tennis volleying performance. Journal of Human Movement Studies.

Information processing and attention with expert tennis players according to their age and level of expertise

The present experiment was an attempt to study the information processing and attention with tennis players. They had to respond by pressing a single key to the onset of different lights that were cue signals. Results showed that: (a) expert players were faster than non experts, (b) oldest players were faster than the others, (c) the more expert and the older the players, the shorter the reaction time, and (d) the players were faster to detect the near lights than the far ones. These results suggest that: (a) the development of concentration is relative to growing up and learning, and (b) younger players show a lack of concentration when compared to adults since their concentration is more narrowly focused and less flexible.

Nougier, Azemar, Stein, Ripoll. (1989). Information processing and attention with expert tennis players according to their age and level of expertise. Proceedings of the 7th World Congress on Sport Psychology, 237.

Expertise differences in preparing to return a tennis serve: a visual information processing approach

The technique of temporal visual occlusion was used to estimate the ability of expert and novice tennis players to use advanced visual cues to recognise the type of serve delivered. A 16-mm film of servers delivering different kind of serves was used. The filmed sequences were divided into five randomly presented segments with parts of the serve occluded. Only serves delivered by a right-handed server were used. Five situations were created from more to less occlusion of different serve parts. There were group differences in all situations. These results suggest that valuable information is selected by expert players during the preparatory phase and during the first part of the execution phase, i.e., from the placement of the ball and the initiation of upper body rotation and the arm/racquet complex motion. Experts players focus on the shoulder/ trunk areas, the remaining information seems to be redundant, whereas novices concentrate their focus around the head of the server. During the execution phase, experts concentrate on the racket whereas novices use more cues. Experts take better advantage of pre-flight cues and need less information to identify the type of serve presented. Accuracy and speed of response are enhanced in experts via their ability to extract information earlier. Novice players used the information differently. Unlike experts, they had to see the ritual phase until ball/racquet impact to be accurate. For them, the ritual period could be a specific preparatory period favouring capture of subsequent cues and evaluation of the upcoming serve. When deprived of the ritual phase, novices were less "tuned" to code the valuable information present in the first phases of the serve

liable to allow identification of the type of serve delivered. They also needed complete vision of the movement patterns of the server (until ball impact) to be accurate.

Goulet, C., Bard, C. & Fleury, M. (1989). Expertise differences in preparing to return a tennis serve: A visual information processing approach. Journal of Sport and Exercise Psychology, 11, 382-398

The demands on concentration in the preparation to return a serve

A dual-task method was used to evaluate the relative demands of concentration in the processes leading to anticipation of the type of serve delivered in tennis. The primary task consisted of identifying - as in previous experiments - the type of serve presented through a 16mm film. The secondary task required a manual response to an auditory probe. As expected, the primary task performance of the expert group was superior to that of the novice group. From these results it is noticed that the demands of concentration are similar in both experts and novices, but performance (accuracy of the response and the decision time) differs, favouring the experts. Beginners depend more upon actual stimuli, they are "stimuli given", whereas experts, in order to anticipate their response, rely heavily on memorised schema; they are "memory driven". Differences between skilled and unskilled players do not lie so much in the speed of operation of the perceptual system but on the organization of the motor system that uses the output of the perceptual system. Results demonstrated that the demand in concentration to assimilate information processed during the ritual phase of the serve are higher than the demands of processing information from the preparation and execution of the serve. It appears, therefore, that effort of concentration is at its peak before identification of the most important cues necessary for adequate performance.

Goulet, Bard, & Fleury (1992). Les exigences attentionnelles de la préparation au retour de service au tennis. Canadian Journal of Sport Sciences, 17, 98-103.

Mental Speed Training in Beginner/Intermediate Tennis Players.

The trainability of anticipatory skills for tennis was assessed. Subjects (N = 34) from a beginner/intermediate tennis class were randomly assigned to either a mental speed or a physical speed (control) training group. They were tested in three laboratory-simulated tennis tasks and three on-court tasks (serves, groundstrokes, and volleys), 1 week before and after the 3-week speed training program. The analyses that were conducted revealed for the laboratory tasks, that the mental speed group made faster decisions in reaction to serves, exhibited faster anticipation times, and showed improved accuracy in predicting serve type and location. No improvements in accuracy were found in the physical speed group. For filmed match-play situations, the mental speed group improved reaction times with training and committed fewer response errors. In general, research indicates that expert tennis players focus

on more meaningful and predictive cues that enhance quick and accurate decision making. In addition, highly skilled performers are better at resolving uncertainty concerning an opponent's actions from earlier cues than beginners. Laboratory results indicate that anticipatory skills can be enhanced in lesser skilled players when appropriate methods are used. The findings suggest that teaching the ability to select and extract meaning from certain anticipatory cues of an opponent's serving motion can greatly enhance the decision-making capabilities of the returner. Coaches should not overlook the need to guide young players in determining appropriate anticipatory cues in various tennis situations.

Singer, R.S., Cauraugh, J.H., Chen, D., Steinberg, G.M., Frehlich, S.G. & Wang, L. (1994). Training Mental



Quickness in Beginning/Intermediate Tennis Players. The Sport Psychologist, 8, 305-318

Visual Scanning and Selective Attention: Elite Versus Novice Tennis Players

This study monitored eye positions while elite and novice players watched filmed tennis opponents perform. Subjects made decisions about two tennis strokes: (a) service type (flat or spin) and directions (left, right, or center) and (b) ground strokes directions. Analyses of the decision making times indicated that elite players made faster decisions, more accurately than the beginners for both types of strokes. Analyses of the eye positioning data revealed significant Fixation Area x Skill level interactions for number of fixations for both strokes.

J. H. Cauraugh, R. N. Singer, & D. Chen, (1996). Visual

Scanning and Selective Attention: Elite Versus Novice Tennis Players NASPSPA Abstracts, 514.

Visual search, anticipation, and reactive comparisons between highly-skilled and beginner tennis players

Simulated tennis playing situations were created for the laboratory testing of visual search patterns, anticipation, reactions and movements to compare male and female, high-level and beginner players. Participants were highly rated university players (N=30) and students enrolled in a beginners tennis class (N=30). Visual search patterns were recorded as they viewed filmed opponents serve and groundstrokes. Also recorded was anticipation accuracy and speed of the intended type and location of serves and the intended placement of groundstrokes. In other testing, execution of split-step was followed by moving rapidly to the correct location for a simulated stroke in response to a series of light cues. Reaction and movement times were recorded. Analysis revealed that: (a) beginners directed more time towards the head region than did the highly skilled, while both groups had similar visual patterns for groundstrokes, (b) experts were faster and more accurate than beginners for anticipation of the serve and for groundstrokes, (c) as for the reaction and movement times in the split-step, experts were faster than novices and males were quicker than females.

Singer, R.S., Cauraugh, J.H., Chen, D., Steinberg, G.M., Frehlich, S.G., (1996). Visual search, anticipation, and reactive comparisons between highly-skilled and beginning tennis players. **Journal of Applied Sport Psychology**, 20, (1), 9-26.

Other articles on this topic

Castiello, Umiltà (1988), Attenzione e tennis. Rivista di Cultura Sportiva.13, 28-33.

Fukami, Fujita, Yoshimoto, Kawahara, Mizuochi, Sukui, Kondoh, Satoh. (1989). A study of temporal adaptation in motor learning: Modelling return of service in tennis. Proceedings of the 7th World Congress on Sport Psychology, 104-105.

Vom Hofe, A. & Fery, Y.A. (1991). Attentional demands of a temporal prediction task: The trajectory of a tennis ball. **Perceptual and Motor Skills**, 73, 1235-1243.

Goulet, C., Bard, C, Fleury, M. (in revision). Peripheal visual information processing in preparing to return a tennis serve. **Human Movement Science**.

COACHING NEWS

from ITF News

Cheikh Berthe (Senegal), Josef Brabenec (Canada), Gil de Kermadec (France), Yusuf Hassan (Zimbabwe) and Jean Koch (Zimbabwe), received Awards for Services to the Game at the ITF's Annual General Meeting held in Cairo. The Awards are given for long and distinguished service to the game of tennis both nationally and internationally. We extend our congratulations to the above coaches.

COMMUNICATION SKILLS CHECKLIST

by Dave Miley and Miguel Crespo (ITF)

Here is a communication skills checklist for tennis coaches. Use it to evaluate yourself, or to have someone evaluate you. Circle the number you honestly think corresponds to each item. The values are the following: 5 (Always), 4 (often), 3 (occasionally), 2 (seldom),1 (never)

Aspect	Item	Value
Verbal	Message contains credible information	5 4 3 2 1
	Message/instruction is consistent	5 4 3 2 1
	Coach uses players' names	5 4 3 2 1
	Coach uses simple and direct messages	5 4 3 2 1
	Coach focuses on one thing at a time	5 4 3 2 1
	Coach uses understandable language	5 4 3 2 1
	Coach repeats and summarises message	5 4 3 2 1
	Coach checks for understanding	5 4 3 2 1
	Coach uses effective questioning	5 4 3 2 1
	Coach uses open questions	5 4 3 2 1
	Coach uses positive sandwich	5 4 3 2 1
	Coach uses positive feedback	5 4 3 2 1
	Coach gives specific feedback	5 4 3 2 1
	Coach is honest	5 4 3 2 1
	Coach has good voice projection	5 4 3 2 1
	Coach has ability to vary the pitch, tempo, volume, rhythm of the voice	5 4 3 2 1
	Coach gives appropriate praise	5 4 3 2 1
	Coach uses opinion to generate discussion	5 4 3 2 1
	Coach tells players what to do rather than what not to do	5 4 3 2 1
	Use of cue words (by player or coach) to enhance communication	5 4 3 2 1
	Coach uses appropriate styles of coaching for various situations	5 4 3 2 1
Non Verbal	Non-verbal message is compatible with verbal message	5 4 3 2 1
	Coach listens to the student	5 4 3 2 1
	Coach uses demonstrations to enhance the verbal message	5 4 3 2 1
	Coach shows interest in the student's message (active listening)	5 4 3 2 1
	Coach uses facial expressions appropriately	5 4 3 2 1
	Coach smiles	5 4 3 2 1
	Coach uses body gestures appropriately (hands, arms) to enhance the message	5 4 3 2 1
	Appropriate use of body contact (high five, pat on shoulder, etc.)	5 4 3 2 1
	Good spatial use, distance from student	5 4 3 2 1
	Clothes and general appearance give a professional image	5 4 3 2 1
	Coach has good hygiene habits	5 4 3 2 1
	Correct use of eye contact	5 4 3 2 1
	Coach uses good body posture at all times	5 4 3 2 1
	Coach positions himself and group correctly	5 4 3 2 1
	Coach uses correct equipment	5 4 3 2 1
	Coach shows concern for the "performance", "the effort", "the player", rather than just	5 4 3 2 1
	for the outcome	The second second

Overall evaluation:

ASPECT	POINTS		
Verbal			
Non verbal			
TOTAL			

Excellent (150 or more), Good (110 to 139), Fair (81 to 109), Bad (41 to 80), Very bad (40 or less).

RECOMMENDED BOOKS

Tennis: la formation du joueur

(Tennis: the player's formation)

Association Enseignants E.P.S.

Level: Intermediate and advanced. 209 pages. It presents a modern pedagogy by combining theoretical thinking and practical experience on court.

The contents of the book are: analysis of the characteristics of tennis, tennis and uncertainty, a model for the formation of the tennis player, towards a pedagogy of the tactical roles in tennis, the construction of the point, how to teach tennis in the school, a training camp model, tennis and physical conditioning, several hypothesis on the fundamentals of tennis, etc.

For more information: Association des Enseignants d'Education Physique et Sportive. Mr. Louis Gobin, 15, rue Humblot - 77012 Paris. Only available in French.

Clinics in Sports Medicine: Racquet Sports (vol.14, n°1, January 1995)

Richard C.Lehman, MD (Guest Editor)

Level: advanced. 284 pages. It focuses specifically on tennis and on current treatment of tennis injuries.

The contents of the issue are the following: establishing percentiles for junior tennis players based on physical fitness testing results, fluid and electrolyte loss during tennis in the heat, exercise training for tennis, the biomechanics of tennis elbow, elbow injuries, biomechanical analysis of the shoulder during tennis activities, rehabilitation of shoulder and elbow injuries, surgical treatment of shoulder injuries, knee pain in tennis players, patellofemoral dysfunction in tennis players, rehabilitation of the lower extremity, lower leg and foot injuries, low back injury, the older athlete with tennis elbow, etc.

For more information: W.B. Saunders Company, Harcourt Brace Jovanovich, Inc. 6277 Sea Harbor DR, Orlando, FL. 32821-9816. Only available in English.

The way to play

Leif Dahlgren

Level: Beginner-intermediate. 200 pages. It focuses on the methodology of teaching tennis. Foreword by Dennis van der Meer. Preface by Doug MacCurdy

The contents of the book include the following: How do we learn?, The way to play (a different concept, mini-tennis my way, the gradual length method). Starters (grains of gold, the corridor, the ready position, practice, control-direction-spin-power). Learning the basic strokes (forehand, backhand, volley, serve, smash). Tennis technique (forehand, backhand, volley, serve, smash). Teaching the game (the coach a role model, be a good demonstrator, etc.

For more information: Minerva Press. London. Only available in English

Kids' Book of Tennis...Over 150 Tennis Games to teach children the sport of a lifetime

Reggie Vasquez Jr

Level: Beginners. 150 pages. Over 150 games that are fun for children to play, while at the same time, help teach the basic tennis skills. Forward by Stan Smith. Preface by Nick Bolletieri. Endorsement comments from Pete Sampras, Andre Agassi, Martina Hingis, Tom Gullikson, Rod Laver, Virginia Wade, Cliff Drysdale, Jim Loehr, Jack Groppel, Dennis van der Meer, etc. This book is the number one seller from over 500 tennis titles on the internet at tenniserver/ amazon/bookstores.

The contents of the book are the following: What's it all about tennis FUN-da-Mentals!, Why use games? communication tools, building a rapport, games skills, game categories, difficulty levels, formations, planning lessons, games, games and more games!, self rally, team, projection, reception, rally, miscellaneous.

For more information: Leading Edge Tennis Inc. Tel: 1 905 883 63 54. Cost. \$9.95. Only available in English.

10th ITF WORLDWIDE COACHES WORKSHOP - NOVEMBER 1997

The ITF is happy to announce that the 10th ITF Worldwide Coaches Workshop will take place at the Continental Plaza Tennis and Beach Resort in Puerto Vallarta, Mexico. The programme is as follows:

MONDAY, 17TH NOVEMBER		THURSDAY, 20TH NOVEMBER	
15.00 - 18.00	Arrival of participants in Puerto Vallarta Ladies' Meeting	09.00 - 09.45	ITF Worldwide Activities Update (seminar) Doug MacCurdy and Dave
20.00 onwards	Buffet Dinner in Continental Plaza Hotel	09.45 - 11.15	Miley - ITF User-Friendly Biomechanics (on
TUESDAY, 18TH NOVEMBER		09.43 - 11.13	court/seminar) Paul Dent - Great Britain
09.00 - 09.15	Workshop Opening Doug MacCurdy & Representative from Mexican Tennis Federation	11.30 - 12.45	Balance, Co-ordination and Footwork drills (on court) Don Chu - USA
9.15 - 10.30	Revision is the Mother of Wisdom (seminar) Frank Zlesak - Czech Republic	FRIDAY, 21ST NOVEMBER	
10.45 - 12.00	Racquet Acceleration and Control (on court) Edgar Giffenig - Germany	09.00 - 10.15	Demonstration on developing serve and return tactics (on court)
12.00 - 12.45	Introduction to Wheelchair Tennis (on		Carl Edvard Hedelund - Denmark
	court) Brad Parks - USA	10.30 - 12.00	Panel Discussion: Player Development
12.45 - 15.00	Lunch and films		Panel of former top players
15.00 - 16.15	A systematic approach to the	12.00 - 14.45	Lunch and films
	development of club and performance	14.45 - 16.00	Improving the game through tactical
	players (seminar)		situations (seminar)
	Frank van Fraayenhoven - Netherlands		Bernard Pestre - France
16.30 - 17.00	Report from the Meeting of Women	16.15 - 17.30	Developing the power game (on court)
	Coaches (seminar)		Lynne Rolley - USA
17.00 - 18.15	Panel Discussion: Coaching Female	17.30 - 18.30	Circuit Training for Tennis Players (on
	Players. Panel members: Daria Kopsic,		court) Don Chu - USA
	Carol Watson, Jai de Louie, Pierre	CATTUDDAY AMED NOVEMBER	
Lamarche, Edgar Giffenig		SATURDAY, 2	2ND NOVEMBER
20.00	"Official Opening Dinner" of Workshop	00.00 10.15	
WEDNESDAY, 19TH NOVEMBER		09.00 - 10.15	Common tennis injuries in competitive players and strategies to prevent them (seminar) Todd Ellenbecker - USA
09.00 - 10.30	New training system for technical	10.30 - 11.45	Biomechanics of stroke production and
	training (on court) Richard Schonborn - Germany		their relationship to injury (seminar) Todd Ellenbecker - USA
10.45 - 12.00	Planning and conducting pre-competition	11.45 - 14.30	Lunch and films
	training camps (seminar)	14.30 - 15.45	The Swedish Method of Developing
	Pierre Lamarche - Tunisia		players aged 16-21 (seminar)
12.00 - 15.00	Lunch and films		Ulf Peterson - Sweden
15.00 - 16.15	Fitness on the Road (seminar) Ivo van Aken- Belgium	16.00 - 17.30	Mastering Serve and Volley (on court) Nick Saviano - USA
16.30 - 18.00	Singles Tactics (on court),	17.45 - 18.00	Workshop Wrap-Up
	Louis Cayer - Canada	20.00	Closing Dinner
18.00 - 18.45	French Federation Video: "The Serve"		
	(in English)	SUNDAY, 23RD NOVEMBER	
	The second secon		Departure from Puerto Vallarta





Palliser Road Barons Court London W14 9EN

Tel: 44 171 381 8060 Fax: 44 171 381 3989/ 381 28 71



Designed and Printed by Wilton Wright & Son Ltd, Units 2/3, Garth Road, Morden, Surrey SM4 4LZ. Tel: 0181-3306944 Fax: 0181-330 5816