Fundamental Movement Skills and Their Application to Sports Initiation

Francisco Seirul·lo Vargas

Profesor in the Instituto Nacional de Educación Física de Barcelona

University of Barcelona

Document of the INEFC de Barcelona; Seirul·lo Vargas, F. (2004-2005)

INTRODUCTION

Normally, the initiation to sports is done by means of models constructed for professionals, and the exercise programs are proposed according to those which are suitable to achieve professional goals in stages supposedly common for all athletes. The same people who develop these models are the same people who indiscriminately apply the selection tests and prematurely detect talents. All of which, in many cases, results in the abandonment of the game or sport by failing to obtain results. The professionals in question use the excuse of an athlete being not good enough, but in truth, many times the failure of the young athlete lies in a mismanagement of training processes that are built backwards from the true needs of the athlete.

The alternative we propose centers on the athlete, in the needs of the individual at a specific time in life, so the proposed tasks are situations only subject to the requirements for competitive sport created in the individual practice; they are formulated with the understanding of the individual as being unique, open, and in continuous interaction with the surrounding environment.

Therefore, the contents of each phase will be built depending on the specific age category and the challenges it poses, with each subject solving these challenges according to their very own talents and dedication. This is the way to find and capture the true talents of the individual.

This proposal is constructed as a model that must be adjusted to the actual situation of each athlete or group of athletes. The core idea behind initiation to the practice of sport promotes obtaining the desired results in the later ages, without a premature rush to early and immediate results, which can only be a consequence of well developed personal talents, and never the purpose of these initial phases.

Every athlete must create a personal project relative to their life in sports, adjusting the project to their needs and potential. This is the only option if you want optimal results in the key times of an athlete's life. At this point will his personal talent and luck define the exact nature of the process and how it should be adapted to the athlete.

THE PROJECT

The criteria to designate each stage and their phases are taken from 1980's proposals of European schools of sport initiation, focusing primarily on the former German Democratic Republic (G.D.R.) and complemented with insights from the sports schools of Russia, France, Italy, and Scandinavia. Based on these criteria we have planned the content of training for young people in F. C. Barcelona during the last 15 years.

The basic thrust of the early stages is primarily physiological, but also contemplated in conjunction with psychosocial aspects, especially in the justification of methodologies and conditions for implementing the tasks.

In stage A of the initiation, phases are demarcated every two years, as in these early ages the physiological and psychosocial processes evolve rapidly and significantly. While in stage B, the phases are 4 years, adjusted to Olympic cycles which could possibly be a priority objective of the high-performance stage, and in some of these specialties bienniums can be made to adjust to world championship cycles. The construction of a proposed life in sports is subject to processes of maturation and development, and the age categories we demarcate and suggest are only approximations, but in any case, these groupings apply to a majority of individuals.

In the ages of stage C the proposals are even more approximate. It depends on which sport, and it should be noted that for men this approximation is closer than for women. In all cases this proposal should be understood as an interpretive model to be understood as a point of reference, which each individual must change according to their goals and interests.

The project is divided into three stages:

A. Introduction to practice
B. Obtaining high performance
C. Decreasing functionality

Each of the 3 major stages happens over the course of 10-12 year periods, and is further subdivided in phases:

A1. Non-specific Movement Practice Phase (ages 5-7)
A2. Generic Polyvalent Devlopment Phase (ages 8-10)
A3. Multilateral Oriented Preparation Phase (ages 11-13)
A4. Specific Initiation Phase (ages 14-16)

B1. Specialization Phase (ages 17-19)
B2. Perfecting Phase (ages 20-23)
B3. Stability and High Performance Phase (ages 24-28)

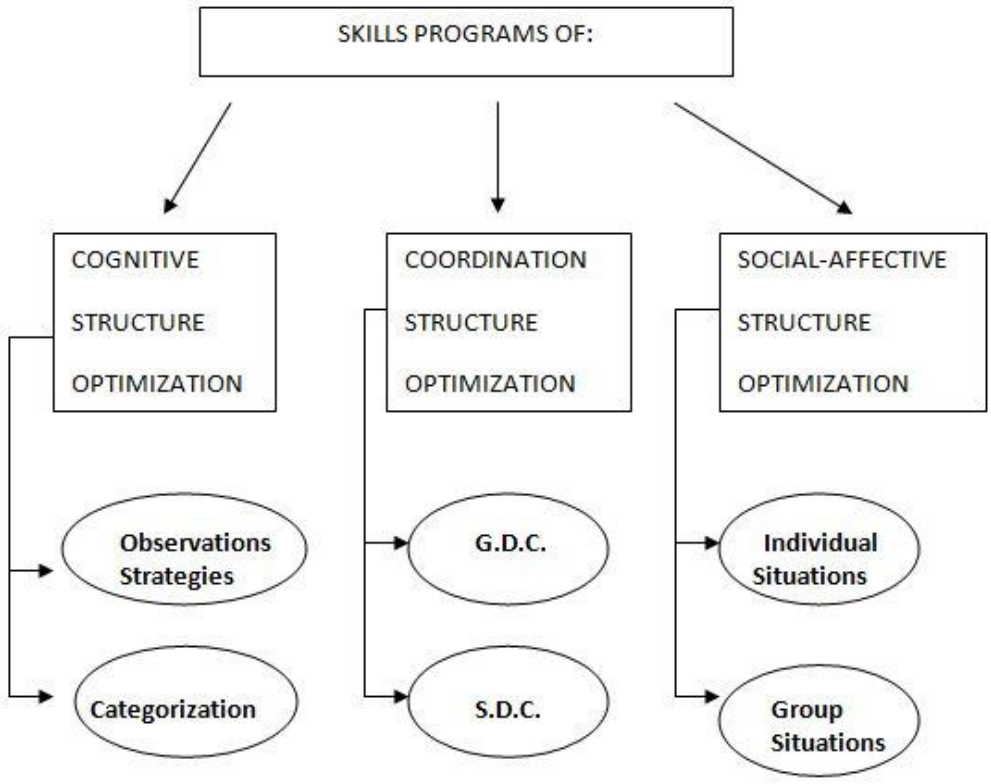
C1. Mantaining High Performance Phase (ages 29-34)
C2. Compensatory Adaptation to Reduced Performance Phase (ages 33-38)
C3. Functional rehabilitation for non-competitive performance (ages 30-41)

It is imperative that every athlete is oriented over the course of an athletic life for a project that prevents very common mistakes when competition is rushed and the temporality of the main criteria – the optimization of the individual – is not respected.

A1 REGULAR AND NONSPECIFIC PRACTICE: 5 TO 7 YEARS OLD

This is a regular practice added to the physical education activities the child performs in school. It includes at least two sessions more per week in addition to the school's physical education.

The intention is to be entirely focused in the integral education of the subject's motor skills. It is not yet known what the student athlete will or wants to be, and that should mean a practice of development sufficient to get a thoroughly developed optimization of all motor skills.



"THE CHILD WANTS TO PLAY SPORTS / BE AN ATHLETE"

G.D.C. General Dynamic Coordination (movement with your own body)
S.D.C. Special Dynamic Coordination (movement interacting with movile objects)

TASK CONDITIONS

We must build tasks in which the activity centers on elements of the cognitive structure, or coordination structure, or socio-affective structure, but tasks sufficient to ensure acquisition within the range of the proposed target.

The tasks should be presented cyclically and with almost the same conditions to confirm their assimilation overtime and in similar situations.

Quantitatively, situations privileging the coordinative and cognitive capacities should be given priority over the socio-affective. But all must have a high level of quality clearly adjusted to the level of the student.

PLANNING

We must know the PE program of schools to complete the contents if they are not targeted.

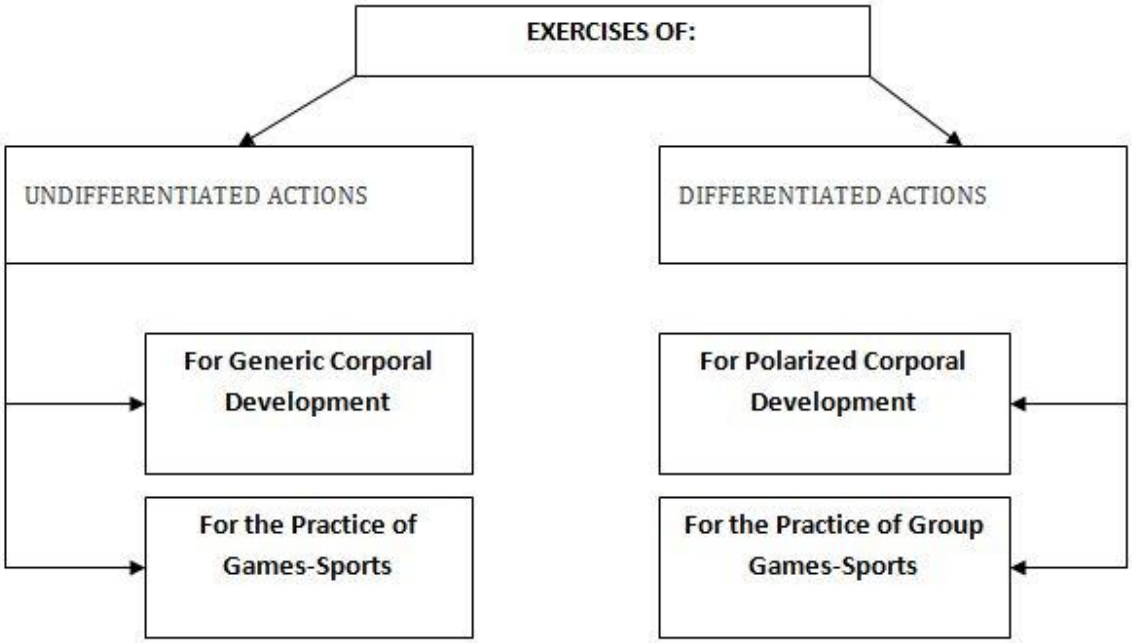
If possible, use the same terms to describe the situations to avoid creating confusion.

Ideally, this practice is every other day and respects the school holidays as comprehensive vacation.

A2 VERSATILE AND GENERIC TRAINING: 8 TO 10 YEARS OLD

Continue the process of generic development to achieve the largest possible foundation of motor skills. A foundation capable of solving the prerequisite motor skill demands of any sport.

We must reaffirm the habituation and integration of the athlete's generic motor skills.



"THE CHILD CAN BE AN ATHLETE ..."

GENERAL ASPECTS OF A2 PHASE

At this point, we focus on making a versatile athlete; we open all possible paths of different motor options for the athlete, this way we avoid losing future potentialities.

Thus, through the continuing Exercise of Undifferentiated Action we have further confirmation of their basic motor skills, as the practice of the previous phase is insufficient to resolve the targeted levels of competency in all areas of their motor skills to be displayed in this moment.

Practice time should increase to at least three sessions per week, in addition to the school practice. These practice sessions may be simultaneous with a day of competitions, but always characterized by focusing on developmental goals and multiple sports. The sport can be an individual or a collective, but the practice should be done without specializing in positions or specific activities; if they can do more, all the better.

It is desirable to enhance adherence from practices, doing the Exercises of Differentiated Action, in those areas where the subject shows an increased level of competency. Although still within healthy ranges and without closed cycles of large numbers of homogeneous repetitions, promoting the full capabilities latent in the subject, which will give personality and individuality to the motor skills and constitute the pillars of subsequent personal performance.

Exercises are defined as being in either the category of Undifferentiated Actions, or Differentiated Actions:

All those here are of an overall generic character, but as the Undifferentiated Actions completely maintain this generic character, the Differentiated Actions have some approximation to certain criteria. That is to say, they (Differentiated Actions) are attracted towards concrete elements (polarized), be they morphological, mechanical, or an interaction of the two. In this way the generic requirements of the personalization process can be solved, and the particular needs of the individual begin to become apparent with the differentiated practice. Each athlete is unique, but it is still necessary to build their generic development and using these types of generic exercises should provide the solution to these needs.

FOR GENERIC CORPORAL DEVELOPMENT

Optimize the knowledge and the realization of one's body with attention to:

- Balanced and generic development of musculature
- Maintenance of joint mobility
- Developing the basic coordination skills
- Familiarization with the basic conduct of self-observation
- Development of Theoretical-Basics

Respecting absolutely the player's integral maturation, we cooperate with him, promoting these aspects to the athlete's own level of motivational achievement is sufficient, and executing with efficiency the proposed situations in practices oriented toward their continuing and varied stimulation, which will allow for identification with his own motor skill efficiency through familiarization with the practice of self-observation.

FOR POLARIZED CORPORAL DEVELOPMENT

Optimizing knowledge and the level of realization of the one's body with attention to:

- Training differentiated toward the incipient muscular deficiencies discovered
- Development of Coordinative Capacities in which the player shows more competence; especially aspects of re-Balance and Motor Control
- Familiarization with self-control behaviors
- Developing Theoretical Basics

Thanks to the differentiated training exercises, we discover the talents and deficiencies that the subject has when faced with practical situations. He also participates in these discoveries, and through their own self-control should aim to increase efficiency in the implementation of each practice.

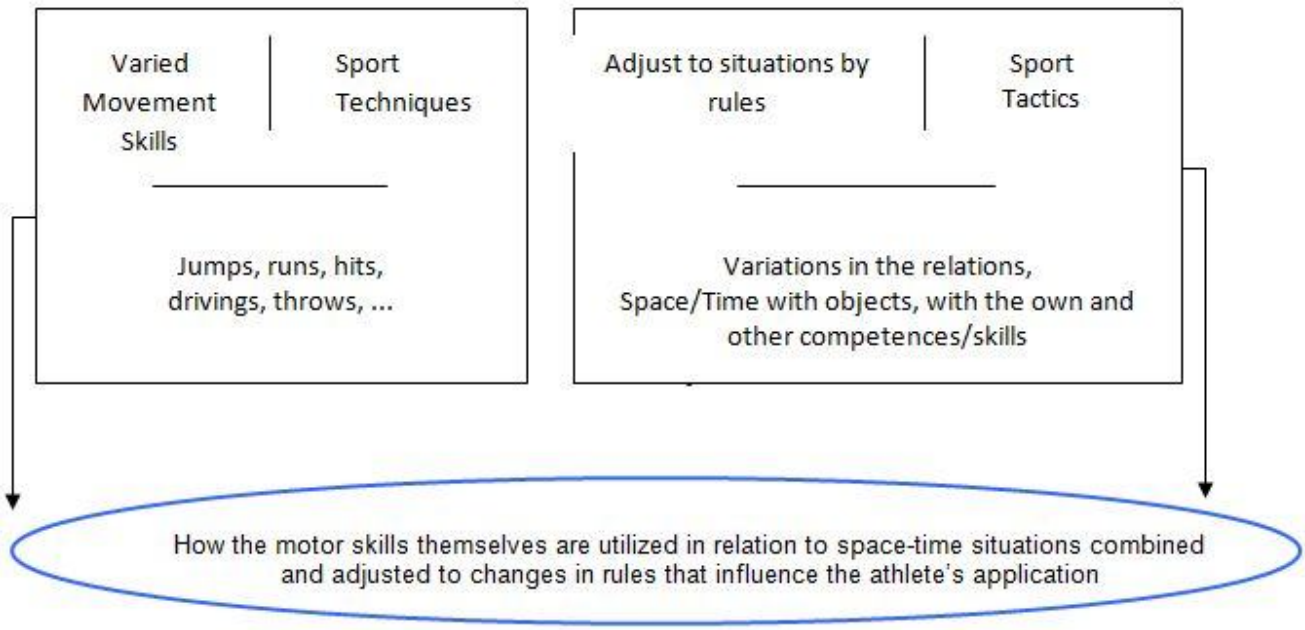
As we see, there is not an early specialization, but practical differentiation in elements necessary for the optimization of the complete student. Therefore, the large variation in games-sports proposed that allow us to observe in depth all the deficiencies and strengths of his competitive personality. The young athlete must recognize these things because it is the first phase of willingness to voluntarily modify and engage in a higher level of achievement.

FOR THE PRACTICE OF GAMES-SPORTS

_ It is practiced in the form of the different sports that involve the diversity of all the player's motor skills.Thus the athlete must adjust his motor skills to the varied regulations of different sports which obviously can be modified - in part to obtain clearer particular objectives.

_ Utilizing a constellation of 2-3 individual sports and 4-5 team sports in order to comprehensively engage all of the player's motor skills.

_ It is not competing in these sports, it is playing the variety of sports, even mixing rules of one with the other, to attain the desired stimuli:



FOR THE PRACTICE OF GROUP GAMES-SPORTS

_ Now appears the need to practice to develop the play of group sports that comprise a certain sector of the subject's capacities in which the subject appears to have some facility of realization, i.e. natural tendencies.

_ The sports practiced are thought of as possibilities for the future, but with changes and variability to avoid premature specialization.

_ There is here an emerging priority to achieve the cognitive foundations of the group sports that in the future could be his specialty.

_ Simultaneous with the cognitive priority is the need to develop situations of interaction varied by their participation in different games that allow continuity in the optimization of the socio-affective that was begun in the previous stage, but which are shaped by proposals tailored to the needs of the player, according to feedback discovered in the varied experiences thus lived.

_ The player himself must, based on their auto -control practices, be able to define their own needs and they can be communicated with an appropriate terminology for acquiring and developing his theoretical fundamentals.

PROPOSAL FOR THE CONSTRUCTION OF TASKS

The Movement Block

 They are more or less complex units of information as sets of integrated possibilities for implementing certain materials pertaining to technical and tactical groups of sports with which they share certain affinities. The conditions of their practice must be accomplished so as to become a vast storehouse of resources without closing off alternatives the athlete can access. So you can preselect tasks more compatible with the specific situation that presents itself.

 There should be a wealth of techniques and tactics, but it must be a "Configuration" in agreement with the variability of those appearing in certain sports with selected affinities. This configuration is the responsibility of the coach.

 The selection of these sports is determined by the degree of familiarity the coach has of the motor skills involved in their implementation. Because this way they may get more or less compatibility between components. The quality of these selections are essential to configure the core block and get the optimization of the practitioner.

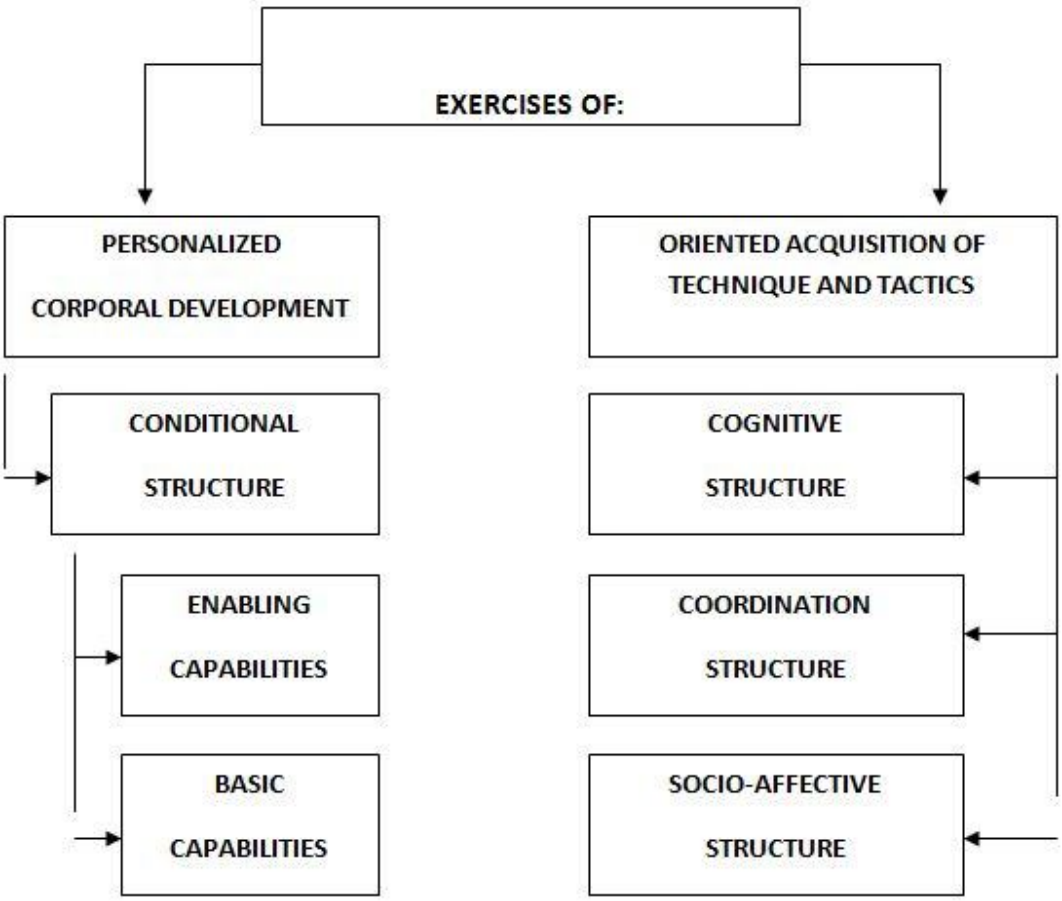
 Knowledge of the motor skills involved should be grown from the perspectives of coordinative, cognitive and socio-affective capacities, which are the categories that comprise the preferred targets for the optimization of the individual at this stage of initiation.

 Their practice is crucial for locating talent in the sports and in these ages they become manifest, helping us in directing talent specialization in the athlete's later stages to follow.

A3 PREPARATION OF MULTILATERAL ORIENTATION: 11 TO 13 YEARS OLD

_ In a progressive manner create a practice oriented toward the sports, and then to the sport, in which the greatest efficacy is shown.

EXPERIMENTATION AIMED TO ACHIEVE THE SKILLS AVAILABLE WITHIN



"THE CHILD IS ALREADY PLAYER OF ...."

GENERAL ASPECTS OF A3 PHASE

_ This phase is key to the project of athletic life, as this is when the emergence of the predominant conditional capacities associated with the process of physical growth begin to appear, and if we do not maintain the balance of these processes with those of technical-tactical learning, the player's auto configuration will always be problematic.

_ It is in this phase when we define the validity of a particular player for a particular sport, though we had already suspected his potential in the previous phase, and this is the time of his configuration.

_ We offer technical and tactical tasks for the game and these are foundations of the subsequent performance of specific practice in the higher levels of this specialization. These tasks have all been the prerequisites of the coordinative and cognitive practices of the phase above.

_ We must propose the largest possible number of technical and tactical sessions where there are different forms of practice to maintain motivation.

_ The number of workouts is increased to a minimum of four sessions in addition to the competition, which will be played in different positions and under different systems of the game.

PERSONALIZATION OF PHYSICAL DEVELOPMENT

_ We must accomplish, while respecting the evolution of personal maturity, development of the athlete's conditional structure.

_ This structure must support the technical and tactical acquisitions that are basic to their sport specialization, but always "subject" to the needs of the individual. The technique must be learned and practiced at full speed of implementation, therefore Basic Conditional Capacity must be cared for in a special way such that it gives the player adequate strength to be able to move fast and so the technique should be practiced under those parameters.

_ Only in those moments can be justified biopsy samples to determine % types of fibers if this is not clear by other procedures.

_ To maintain multilateral functionality in this phase of technical and tactical acquisitions, we focus the optimization of conditional structure in the basic skills to avoid fundamental weaknesses that are crucial in the auto-configuration process.

_ Maintenance of facilitating capabilities is essential to achieve the targets indicated above.

ACQUISITION TARGETED TO THE TECHNICAL AND TACTICAL

_ The concept should be oriented to the observation of the process from the perspective of player, because the technique and tactics will become their technique and tactics, so that the proposals should be guided by the level of resolve this particular player has for acquisition.

_ We must therefore suggest tasks tailored to personal potential, and this, in a group practice, is feasible if we propose a variety of situations in a context for understanding, and without a large number of repetitions.

_ To facilitate these processes, should not do throughout this phase any other sport, although training of unique situations, cognitive situations and socio-affective situations typical of other specialties can be introduced into this practice.

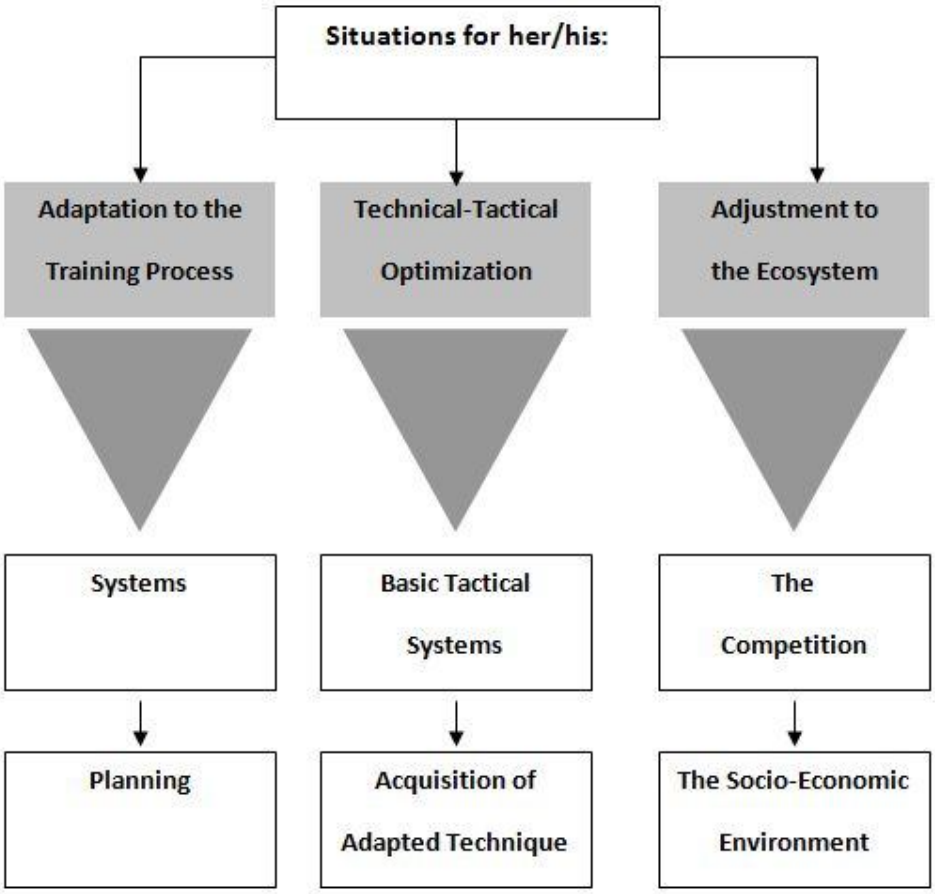
_ Maintaining as much as possible the "prospective potential" of techniques available should govern all the achievements and the coach should stimulate this with information and a variety of proposals.

_ Both the trainer and the player must focus on valuing the execution of the actions, and not the result. The major motivation of the player must be doing well, and afterwards associate their efforts with the consequences, with the results of his performance.

A4 INITIATION OF THE SPECIALIZATION: 14 TO 16 YEARS OLD

_ It leads the athlete within their chosen sport to the acquisition of global tactics and techniques, and then further towards specialization in a specific position which can claimed for their own based on their personal capabilities.

_ Arrival and adaptation to the specific sport suited best to the athlete's personal ability.



"NOW PLAYING ON THE CERTAIN POSITION"

GENERAL ASPECTS OF A4 PHASE

_ In the last phase the player has a certain personal level in all the techniques and tactics of the sport they have chosen. At this point the player enters into the initiation of his specialization. Specifically, to acquire the initial elements that are unique to a particular demarcation, confidently knowing the groundwork has been laid, having realized everything in the process for this achievement.

_ This is the time where the coach can make a projection on the future of the player. If, after this phase, the player does not confirm his talent, then he should withdraw from highly competitive environments in that specialty.

_ The player now enters the game as a part of the collective group based on his personal capabilities, and in this context must start the acquisition of all appropriate values and details of the sport and of the competition in which he has chosen to specialize.

_ The morphological development weighs heavily on determining certain positions within the team. So if a player has confirmed his defensive skills versus the offensive the possible morphological changes that occur in these years will have time to finaly define a specific position in the defensive line; the issue of specific positioning should clearly clarified at the end of this phase.

ADAPTATION TO THE TRAINING PROCESS

_ It must have sessions with a focus on the conditional capacities. The systems will be used to enhance the skills the player needs to resolve situations within their area. The preparation is still prioritize the needs of the game compared to the competition and result.

_ Planning should respect the configuration of the player with programs tailored to their needs from the most general at the beginning of the week and cycles, to the most specific at the end of the week and cycles.

_ Now five days of training and competition are proposed, with one day of rest weekly. As at least one and a half month break between seasons.

_ Planning of simulated preferential situation with adapted difficulty and with alternatives if needed to give rest to the systems involved.

TECHNICAL-TACTICAL OPTIMIZATION

_ So far we have focused on technical and tactical processes of the individual. From this point the individual is prepared to assume a role within a group so you have to solve the tactical compromises inherent in the collective, as well as acquire the technical capacities required for the position they occupy within the team and the successful fulfillment of the tasks that comprise their role.

_ The speed and variety of performances are put to the service of the team and with any commitment that the team makes during the year to participate in competitions.

_ Individual technique adapted to the position, but it should not be raised to the level of absolutes until you have experienced and proven its validity in all situations that provide a certain basic tactical system flowing from the game of the actual team.

_ Nearly all the technical achievements should be proposed in relation to associated tactics for the player to self-assess their performance in consonance with the valid tactic for which it was executed. This also confirms the validity of his talent because a fundamental concern in in this phase is his commitment to the team concept.

ADAPTING TO ECOSYSTEMS

_ To confirm the level of talent of a player in this phase we also have the knowledge of how the athlete adapts to the ecological conditions in which the sport they practice operates.

_ The way they face the competition, how to assume their role in the team during the game, on what ways will they affect the outcome, how to accept criticism and praise, and everything that surrounds the competitive world, define other elements of personality of the player. We need to make training sessions that partly simulate these conditions, but the competition itself, which must also be used as a route of optimization, using techniques of self-evaluation and reflection.

_ On the other hand, the culture that develops around the sport, has an important role in defining image of the player. The team environment, their assessment within the club, the social meaning in the city and the economy, and the media, nuance many aspects of the player's personality. In fact, these often have a greater impact than their own technical and tactical training. In this phase, we must discern the basis of their suitability to the ecosystem for this not to interfere in the project of progress toward high performance.

Technical English Translation by
Tod Herskovitz

www.CopyFreedom.com