Coaching education program for United Arab Emirates Ice Hockey Association
Building the framework and level 1 material

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The purpose of building a coaching education program for UAE Ice Hockey was to create and assure a continuum for coaching quality in UAE Ice Hockey. The idea was to build a structured program with easily understandable material that would bring out practically competency assistant coaches/instructors to Abu Dhabi Ice Hockey School juniors.

Abu Dhabi Ice Hockey school is a new organization located in Abu Dhabi. With only one rink and restricted ice time the key issue is to provide planned practices with quality coaching for the players. The idea of this coaching program is to produce practically capable coaches for youngest junior groups. Level 1 of the program is targeted for new-inexperienced coaches and old local Emirati players and its goal is to prepare them to coach the youngest groups at the school.

Program is based on specific key learning objectives. These learning objectives are the base of the whole education program and they have been defined according to the current needs of ice hockey development in UAE. The teaching material is built around these learning objectives and the effectiveness of the program will be tested through them.

This manual will go through basic concepts of coaching junior players in ice hockey and human development process in childhood as well as basic leadership and communication principles.

The project started in December 2009 and is ongoing until 2011 May.

The idea of this project is to be the basis for a more stable development of the quality in coaching and player development in UAE ice hockey.

Key words
Coaching, juniors, player development
Table of contents

1 Introduction ........................................................................................................... 1

2 Coaching in juniors ............................................................................................ 3
  2.1 The big Picture of coaching....................................................................... 3
  2.2 Role of the coach....................................................................................... 4
  2.3 Psychological development on children and youth............................... 5
  2.4 Childhood sports – Base for active lifestyle......................................... 7
  2.5 Skills development in childhood.............................................................. 8
  2.6 Basic nutrition guidelines....................................................................... 10

3 Windows of accelerated adaptation ................................................................. 11
  3.1 Window of accelerated adaptation for speed...................................... 11
  3.2 Window of accelerated adaptation for strength................................... 11
  3.3 Window of accelerated adaptation for endurance.............................. 12
  3.4 Window of accelerated adaptation for mobility................................. 12

4 Long term athlete development model............................................................ 14
  4.1 Fundamental stage................................................................................. 14
  4.2 Learning to train stage ................................................................. 15
  4.3 Training to train stage......................................................................... 15
  4.4 Training to compete stage................................................................. 17
  4.5 Training to win stage......................................................................... 17
  4.6 The Retirement stage........................................................................ 18

5 Organizing practices for junior teams.............................................................. 19
  5.1 Warm-ups and cool-downs................................................................. 19
  5.2 Practice planning............................................................................... 20

6 Effective communication & teaching techniques .......................................... 22
  6.1 Effective Communication................................................................... 22
  6.2 Teaching Techniques........................................................................ 24

7 Empirical part...................................................................................................... 27
  7.1 Project planning............................................................................... 27
  7.2 Project Implementation............................................................... 28
7.3 Project assessment ................................................................. 29
8 Summary and Discussion .......................................................... 31
9 Bibliography ............................................................................. 33
1 Introduction

The idea of starting to build a coaching education program to the Emirate of Abu Dhabi started after development meetings with the Asian Sports Development Manager, Jukka Tiikkaja. With only few educated coaches and limited ice time in Abu Dhabi, we reached a conclusion that it would be important for United Arab Emirates ice hockey development to have this kind of program. With very limited ice time the quality factors in practice organization and feedback becomes very important. The technical manager of UAE Ice Hockey Association expressed his interest to start planning this program.

No time limits were set for the program to be ready, because the author had a lot of other duties at the same time: acting as head coach of UAE men’s national team, head coach of Abu Dhabi Storms men’s team and assistant coach/instructor in Abu Dhabi ice hockey school. Due to authors’ other responsibilities the program was to be built as extra work.

Abu Dhabi Ice Hockey School operates under Abu Dhabi Ice Sports club and receives governmental funding from the Abu Dhabi sports council. As a new, constantly evolving organization the school has faced delays and problems, but it continues to develop its’ structure and daily working culture. One of the core goals of the school is to raise local Emirati players to compete at later stage in UAE National teams, spread knowledge of hockey in UAE and promote the new sport at an exotic location.

At the moment the school consists of five different groups: Skating school, U9, U12, U15 and U18 teams. These groups are multinational, having players from all over the world, mostly from Canada and UAE. Teams have players also from European countries, such as Sweden, Finland and Germany. The number of players at the school is around 200 and all groups have ice time only twice a week. For this reason every ice practice should be well planned and organized to maximize the development of players. Practically capable coaches are needed to every practice to assure the practices are developing for the players.
The learning objectives of the course are defined for three levels, but my part of work is to plan level 1 implementation and material. Level 1 deals with following things: planning and organizing efficient practice sessions, controlling the group/giving feedback, role of the coach in the club, technical main points in skating, stickhandling, basics of warm-ups/cool-downs and basic nutritional information. With basic knowledge and practical capability in these areas we assure that the school has competent instructors and coaches in youngest junior groups. Many of these instructors will consist of parents of the players. Goal is to involve also local Emirati National team players who have over ten years of experience in playing ice hockey. Some of these players are getting older and their time will come soon when they retire from playing. It would be ideal to get these locals, who already have some understanding of the game, to be part of the coaching in future. Coaching local juniors is much easier when the coach speaks Arabic as his native language. The Association and the club have to enforce these players to join to coaching for the future development of this sport in UAE.

The Author will leave his work after 2010-2011 season in UAE and move along towards new challenges. The program product will stay with the UAE Ice Hockey Association and with the Abu Dhabi Ice Sports Club. Plan is that next competent coaches hired to Abu Dhabi can be the main lecturers of the program and will use this tool to provide knowledge and skills for new coaches in Abu Dhabi Ice Hockey School.
2 Coaching in juniors

2.1 The big Picture of coaching

The base for an athlete’s career is made already as a child and in adolescence. Every coach should acknowledge the requirements of goal-directed sports in different age groups. One of the essential goals in coaching is to give the athlete a chance to play and succeed according to his/her own skills. The development of an athlete is usually tested through competition results. Beyond the competition outcomes, coaches should monitor the athlete’s development continuously with tests. It is essential for the athlete’s self-confidence, during all stages of development, to get positive experiences from sports, and it is the coaches’ responsibility to show the development in different areas. This is easily shown by testing the athlete. (Forsman & Lampinen 2008, 13.)

A good coach is able to support the athletes overall growth process through daily work with the athlete. There are competitive teams and recreational teams in all sports, but the people are same in both groups. Difference is that some have more competitive goals than others and this affects the volume of training and difficulty level of practicing. It is important in both groups, that the participants get positive experiences through right practicing and development. A good coach can plan and organize practices to match the athlete’s skill level and push him/her to competitions and games where his/her self-confidence grows stronger. Coaching is mainly two-way interaction between the coach and the athlete. A good coach knows basic mechanisms of interaction and can apply different ways to motivate the athlete. (Forsman & Lampinen 2008, 18.)

Coaching is not only organizing drills. Practice planning and organization is the base for a practice session. After this is feedback, demand of quality, drills that effectively develops players’ skills and same time supports the expected way of playing in real game situations. (Forsman & Lampinen 2008, 20.)
2.2 Role of the coach

Coaching involves multiple various tasks from planning and organizing to guiding individuals and meeting with different people. Coach is expected to be a leader, teacher, organizer and a role model. The influence the coach gives to players has a huge impact on the overall growth process and affects his/her success in the sport. The coach needs to be able to encourage and support players, be enthusiastic and caring towards the player’s needs. (IIHF coaching level 1 material 2010, Role of the Coach.)

Coach needs to be able to set goals for a season that he/she wants the players to reach. Goals must be established from general goals towards more specific goals e.g. learning a specific skill. Setting short and long-term goals will help to divide the season in parts. Goals need to be challenging enough, but realistic at the same time. Coach should try to develop leadership abilities in his/her players by joining players to decision making and giving them responsibilities e.g. running a warm-up session for other players. By giving responsibilities to players starting from young age will create more confident and more individually capable players in the future. (IIHF coaching level 1 material 2010, Role of the Coach.)

Coach should try to teach the players necessary skills to meet the demands of the sport. The skills should be taught in a progressive way starting from fundamental skills progressing towards more game like practicing gradually. Understandable use of language is very important and the coach needs to realize that players skills develop in different speed. Dividing the players in skill groups will motivate the players more and gives all the players the opportunity to acquire skills more quickly. (IIHF coaching level 1 material 2010, Role of the Coach.)

The coach should derive to be a model of co-operation and sportsmanship as well as demonstrate fair play and respect. Developing a positive learning atmosphere and giving feedback and instructions in a way that motivates and challenges players should include to the everyday work with the players. (IIHF coaching level 1 material 2010, Role of the Coach.)
2.3 Psychological development on children and youth

From every child and youngster evolves a unique person. This means that every person builds up a unique way of doing things and how he/she behaves. Human personality evolves throughout the whole life. Personality forms from temperament and interaction with the environment, especially home, school and sports. The way of parenting, raising a child and also cultural aspects affect child’s personality remarkably. Sensitive or shy children find it most important that they feel being accepted. Different cultures accept different behavioral manners and this fact is to be taken into consideration when teaching/instructing children and youth in different cultures.

It is important to remember that every child is different. Every child needs individual support, encouragement, control, limitations and support. Every child needs to be understood and accepted as himself/herself.

It is good for a coach/instructor to remember that a child should not be marked e.g. as a troublemaker if he/she disagrees or acts in an unsatisfying way sometimes. It is normal that child’s hereditary qualities raise different kind of feelings and thoughts among coaches/instructors. Some of these qualities are annoying and some awake positive feelings. Some of the players might be easier to control and some need special attention and discipline. It takes time for a coach to find the right way to control all different personalities and requires getting to know yourself and the children better on the way. The right way is found usually when the coach/instructor is giving his best for the sake of the children’s learning experience. (Hakkarainen2009, 103-105.)

Every child learns skills in individual speed. If a child learns some skill slower than a defined average age, it doesn’t mean that there is a dysfunction. It is important that child’s growth and development is monitored and evaluated in a wide spectrum, not according to one specific skill. (Hakkarainen2009, 111.)

Ages 3-4

It is important for a child to see other kids and learn the rules of social interaction. As learning social skills has not yet properly started, the interaction doesn’t always work well. Some kids might get aggressive in conflict situations. Coach/instructor should not be scared of this, and the kids need to be taught to learn new ways of handling the sit-
A child is usually enthusiastic and brisk and wants to do records. Coach should create motivating ways of teaching new skills e.g. through simple challenges. A child needs space and versatile equipment in his games both inside and outside the house. (Hakkarainen2009, 112)

Ages 4-6
In this age child gets excited of simple games with simple rules and team games. Losing a game might still be hard. Child enjoys role games where the imagination is a big motivator. Therefore, different kind of tracks with versatile activities fit perfectly when planning the activities. Child starts to evaluate his skills and compare them with others and this has a huge impact on child’s self-confidence. The coach needs to make sure that all the players get positive experiences and all can manage the tasks within their skill levels. Games in this age might get rough sometimes and this exposes the child into risky situations, where the coach needs to be able to define the rules clearly and control the situation all the time. The child learns slowly to understand difference between right and wrong. He/she understands what is justified and fair and gets upset if he/she is treated in an unfair manner. (Hakkarainen2009, 113.)

Ages 6-7
Child may compare his skills to others and doubt them. He/she can demand too much from himself and be afraid of mistakes. Because of this the coach needs to support, encourage and acknowledge the achievements of the child. In this age, playing and games are the source of happiness and creativity. Coach needs to include fun games and playing into the child’s activities. (Hakkarainen2009, 114.)

Ages 7-8
School brings a lot of new requirements for a child. It is important for the child’s self-confidence to be ready for the challenges at school and that he can manage there without bigger troubles. Constantly too high expectations and failures take out the pleasure of the child’s schoolwork. Child needs positive experiences, an opportunity to learn new things and enough support. It is good for a child to learn to accept losing and failure. This acceptance will grow him as a person and make him capable of handling losing involved in sports and games. Child needs to learn to see failures as challenges and
opportunities for development. Coach should do this by using positive and fun approach in teaching. Teacher and coach are important authorities for a child during the first school years. His activities are motivated by the desire to perform his skills to important people e.g. adults, teachers, coach and parents. During the first school years the child is often skilled in his activities and physically active. New skills are required easier and old skills can be easily strengthened. Developing sports skills create the base skills e.g. to ball games, dancing, and swimming. Coach needs to apply versatile activities to his planning. (Hakkarainen 2009, 115-116.)

Ages 9-11
Child in this age is often balanced, active, social and interested in many things. Child sees himself more and more as an individual, who wants to express his opinions and rights. Earlier, the child listened and accepted everything the coach/teacher said, but might now be much more critical towards authorities. He wants to make decisions and present his opinions. Still, most important thing for a child is to feel accepted in the group/team he is involved in. The physical appearance becomes stronger, bones and muscles become stronger, which creates the base for more advanced sporting activities. Child might want to change the sports he has been participating just because he wants to be an individual and make decisions of his own. It is good for a child’s wellbeing that he finds a sporting activity that brings him enjoyment and positive feelings. This is why an instructor/coach needs to keep the activities versatile and motivating. (Hakkarainen 2009, 116-117.)

2.4 Childhood sports – Base for active lifestyle

When moving on from childhood to youth the sports related activities decrease drastically. This phenomenon is not only seen in western countries, but all over the world in different cultures. Instead of doing sports, youngster prefers to sit on the sofa and watch TV or play video games. School trips are more often done by car or bus, rather than walking or biking. School sports alone doesn’t meet the requirements of sufficient physical activity, but is has its’ own special way to contribute in future sports performances of a child. It can have a positive affect on child’s physical, psychological and
social skills and wellbeing and it helps the students to realize the importance of a healthy lifestyle. (Hakkarainen2009, 55.)

Key factor in childhood sports is falling in love to a game and/or sports in general. It requires positive experiences from the events and practices. To be able to have positive experiences the practices/events have to be planned to match the skill level of the child. In a sports event, coaches and parents should focus on reinforcing positive things in child’s performance, regardless of the result. Through positive feedback and positive performing atmosphere the child is given the chance to fall in love to the sport and create a habit of active and healthy lifestyle. (Forsman & Lampinen 2008, 38.)

Parents have often a crucial status in child’s sporting activities. Parents’ guide their kids into activities controlled by adults, and in these activities sports have a strong status. Parent’s support and financial investment is an absolute requirement for the possibility of child’s attendance to the sport, especially with children and youngsters who derive to be professional athletes. On the other hand some parents may try to be too active and push the child too much. This can end up in negativity and unpleasant feelings towards training and the sports. Coach can bring this issue up e.g. in a parents meeting. (Hakkarainen2009, 32.)

To create positive atmosphere it is important that interaction between coach and child works in both ways. Coach can heighten the effect by asking the child’s feelings and thoughts. Coach should give the player feedback regularly, in a positive and constructive manner. The feedback needs to be given in language simple enough for the child to understand it. (Forsman & Lampinen 2008, 39.)

2.5 Skills development in childhood

Motor development means a process in which a child absorbs different motions and athletic skills. During this process the child’s muscle and nerve system develops and his/her body structure and size changes. Heritage/genes and environmental influences affects on the motor development of the child.
First stage of motor development is the reflex stage that goes from the birth to approximately the end of first year. During this stage the baby reacts on different stimuli’s which secure the baby during first months, such as diving, swallowing and seeking. Step by step the baby learns how to willingly move his/her body. At this stage the baby tries many kind of new movements such as walking, throwing, jumping, but the movements still have many errors.

Third stage of motor development is learning basic motor skills. This stage is ongoing on average from the beginning of age two all the way to the end of age seven. The basic motor skills include balance skills e.g. stretching, turning, rolling, movement skills e.g. walking, running, hopping and handling an item e.g. throwing, receiving, kicking. The basic motor skills are the base of learning general overall sport skills later on.

Fourth stage of motor development is stage for specialized movement skills and starts around the end of age seven. At this time the child starts to grow interest on different kind of sports and learn different kind of skills e.g. gymnastic skills. Learning different sports and different sport specific skills requires the ability for basic motor skills. Sport specific skills mean e.g. in ice hockey shooting, passing, skating and checking. Learning basic motor skills before the age of seven ensures faster development and learning of more difficult skills in the future.

The last stage of motor development is utilizing the acquired skills. This stage begins approximately in the age of 15 and continues throughout the rest of the life. People participate in different sports in different levels and make use of their acquired skills. (Hakkarainen 2009, 240-241.)

Training experiences modify the central nervous system to meet the demands of the environment and activities in the best way. Versatile training creates and strengthens many different nerve paths in our central nervous system. These nerve paths are utilized in acquiring and learning new skills. Even though a skill required to perform a task might be new; an old pattern from an old skill is still used in learning the new skill. This way versatile training experiences form a great deal of motor talent. Because of this, creating and assuring versatile practice regimes is one of the biggest challenges in junior sports. (Hakkarainen 2009, 244.)
2.6 Basic nutrition guidelines

The nutrition we intake daily forms the overall diet, that affects to our mental and physical wellbeing, health and overall ability to operate. An ideal diet contains versatile healthy components of proteins, carbohydrates, fats, vitamins and minerals and enough energy to cover the body’s daily need. Higher level of activity increases the need of energy intake. (Fogelholm&Rehunen 1987, 116)

Young athletes need enough calories enough calories for basic growth and in addition extra calories required for sport activity. Athletes should eat balanced amounts of carbohydrates, proteins and fats, the major nutrients, to provide fuel and energy for muscle action, growth, repair and recovery from daily and sporting activities. Eating is also psychological and therefore should consume variety of nutrients to keep eating interesting. (Bonci 2009, 10)

Athletes should eat many times during the day and divide the energy intake to many parts. Fuel intake can be divided for example to a breakfast, lunch, before practice snack, after practice snack, dinner and evening snack. The following example means already six times of eating. Foods such as pizza, chips, mayonnaise, burgers have high amount of calories and wrong sources of fats and for this reason should not be consumed daily or even weekly. Chicken breast, low-cream pasta, eggs, yoghurt for example have high levels of protein and not too much of fat are good for athletes that need energy, protein and less fat than e.g. fast food. (Bonci 2009, 14-23)
3 Windows of accelerated adaptation

When creating long term practice plans one needs to consider the periods of accelerated adaptations, meaning periods when development of a quality e.g. speed happens partly with natural growth and when the development is easiest and most efficient. These periods only give direction for planning and in practices one needs to always pay attention to the individual growth/development speed of a child, as well as to the training background. (Hakkarainen 2009, 140.)

3.1 Window of accelerated adaptation for speed

Speed is a strongly congenital feature, but it can be develop if training starts early enough and the periods of accelerated adaptations are utilized efficiently. Features affecting speed are innervation (speed frequency, reaction speed, sense of rhythm), skill and strength level. In childhood the speed training should emphasize versatile drills and games that develop speed frequency, reaction speed, rhythmic ability and skills, because these attributes depend on the functioning ability of the nervous system. After puberty it is slow and difficult to develop these attributes. Strength training improves speed, but should be increased during puberty, not in childhood. (Hakkarainen 2009, 141.)

Running as a skill develops significantly between the age of five and seven and that should be trained through different small and large-area games and plays. Window of accelerated adaptation for speed frequency is during the age of 7 to 12 and for stride length during the puberty. Training of speed strength and explosive speed should be emphasized in the childhood. (Mero, Nummela, Keskinen&Häkkinen 2004, 300.)

3.2 Window of accelerated adaptation for strength

The produced strength of the muscles depend mainly on the innervation ability of muscle cells, meaning the nervous systems ability to control muscle cells, gross-section area of muscle cells and their metabolism. Before puberty strength training should include, muscle coordination exercise, learning the right techniques for strength training
and speedstrength e.g. in form of jumps and medicine ball throws. In addition to in-
nervation emphasis before puberty should be clearly directed to muscle endurance and
aerobic qualities of muscle work. Most of movements should be done by own body-
weight with sets that doesn’t pile up too much lactic acid. Especially hip area muscles
and the core need a lot of concentration to prepare the body for later heavy strength
training. (Hakkarainen 2009, 142.)

3.3 Window of accelerated adaptation for endurance

The base fitness for future heavier training is built through childhood’s endurance
training, whatever the sport will be. Hearts ability to function develops steadily from a
baby all the way to end of puberty. Thickness of capillaries, the amount of aerobic en-
zymes and lung capacity are essential factors when considering endurance and these
develop already in an early stage if the body gets enough aerobic training stimulus.
Aerobic training should be done in some form daily minimum of 30-60 minutes.
Childs body can function well and recover particularly fast from anaerobic sets of 10
seconds, but cannot handle the lactic waste products well, because removing of waste
products and anaerobic metabolism hasn’t developed yet to a sufficient point. Because
of this speed-endurance training in puberty should concentrate on short intensive work
periods, 15s, where no lactic acid builds up. After puberty starts the accelerated adapta-
tion for anaerobic training due to the fact that the childs body can then deal with the
waste products produced by the body during intensive training. (Hakkarainen 2009,
142.)

3.4 Window of accelerated adaptation for mobility

Mobility has a positive influence for strength qualities, endurance, speed qualities and
skill. Training for mobility should be started early in childhood and the volume should
be increased gradually. Maximum levels of passive mobility should be reached between
ages 11-14. When a person’s range of motion is reached with the help of an outside
power, we talk about passive mobility/stretching, and when the range of motion is
reached by the persons own strength, we talk about active mobility/stretching. Both
properties need to be trained daily during the entire career, but active mobility has a
greater affect in sports. Especially during the peak height velocity in puberty, a lot of emphasis should be put on mobility training due to the possible stiffness caused by the PHV, to prevent injuries and motor qualities. (Hakkarainen 2009, 142-143.)
4 Long term athlete development model

A specific and well-planned practice, training, competition and recovery regime will ensure optimum development throughout an athlete's career. Sustained success comes with long-term training and performing, rather than having only short-term plans and goals. (Balyi& Hamilton 2004)

Long-term athlete development model in late specialization sports include six stages of development. The stages are; fundamental stage, learning to train stage, training to train stage, training to compete stage, training to win stage and the retirement stage. Late specialization sports like e.g. team sports require a generalized approach to train in early stages. In the two first stages the training should concentrate on developing general motor and technical-tactical skills. (Balyi& Hamilton 2004)

4.1 Fundamental stage

This stage is targeted for males’ 6-9 years old and females 6-8 years old. Objective is to learn all fundamental movement skills and building overall motor skills. Fundamental movement skills, such as running, jumping, balancing, throwing, need to be learned and mastered before moving to sport specific skills. Using a positive and fun approach in teaching these will contribute highly in future sports performances. Putting the emphasis to motor development will produce players with better trainability in the future. (Balyi& Hamilton 2004)

Fundamental motor skills must be developed between ages six to twelve to obtain sport-specific skills later in the future. Versatile training regime to different components of skill is important. Development of agility, balance, coordination and mobility happens fastest in this stage, from ages 6-9. Developing mobility and flexibility requires more effort in later stages. Strength training and anaerobic training should be avoided at this stage. (Forsman&Lampinen 2008, 415.)
The first “window of accelerated adaptation to speed” or “critical period of speed development” occurs during this phase, age 6-8 for girls and 7-9 for boys respectively. Light strength training can be done with the child’s own body weight. Simple rules and ethics of sports should be introduced to the children in this phase. Physical activity should continue throughout the whole year and during schools summer and winter breaks, multi-sport camps are recommended to have versatile activities. (Balyi& Hamilton 2004)

4.2 Learning to train stage

The learning to train stage is considered to be between nine to twelve for males and eight to eleven for females. The objective of this stage is to learn all fundamental sports skills and to build overall sports skills. Specialized movement skills are learned between ages seven to eleven, and are specialized sports skills. Skipping the fundamental sports skills and specialized movement skills can be detrimental for the child’s future participation in sports and physical activity. (Balyi& Hamilton 2004)

In this age preparing training for speed, speed strength and aerobic endurance should be included, even though the windows of accelerated adaptation for these qualities will come later. (Forsman&Lampinen 2008, 415.)

During ages 9-12 comes the ”window of accelerated adaptation to motor coordination. All general overall sports skills should be learned during this phase. If this phase is left out from practice planning the players/athletes chance to reach his full potential is compromised. A 70:30 practice competition ratio is suggested and this requires planning and organizing from the coach. (Balyi& Hamilton 2004)

4.3 Training to train stage

This stage is considered for ages between 12-16 for males and 11-15 for females. Objectives for an athlete in this stage are to build the aerobic base, build strength towards the end of the phase and further develop sport specific skills. Idea is to build and develop the “engine” of the athlete. (Balyi& Hamilton 2004)
At this age the general requirements of skills should be in order and learned, creating the possibility to start concentrating more in learning sport specific skills. Good fundamental skills create the base for faster learning in sport specific skills. Effective/intensive training is possible, when preparing practicing has been done already in earlier phases. (Forsman&Lampinen 2008, 415.)

During this “training to train” stage, the athlete strengthens his basic sport specific skills and tactics. In this stage the ”window of accelerated adaptation” is in aerobic and strength training. Optimal trainability starts with the onset of Peak Hight Velocity (PHV) or the major growth spurt during maturation. After the onset of PHV, aerobic training should be prioritized. Skill, speed and strength level should at least be maintained if not further developed. Flexibility training needs also a special emphasis due to the sudden growth of bones, tendons, ligaments and muscles. Both strength and aerobic trainability depends on maturation levels. In this age the maturation levels vary highly between players. (Balyi& Hamilton 2004)

Especially in puberty the growth spurt can temporarily cause stiffness and motor problems. At this time versatile mobility practices should be emphasized especially in athlete’s individual training to prevent injuries and to preserve learned motor functions. (Hakkarainen2009, 143.)

A 60:40 ratio between training and competition is recommended by the experts, where 40 includes competition and competition specific training. These numbers vary depending on the sport and the individual. (Balyi& Hamilton 2004)

Learning to train and training to train stages are the most important stages in athletic preparation. The athlete will not reach his full potential if one of these stages is passed. (Balyi& Hamilton 2004)
4.4 Training to compete stage

This stage is considered for males with age between 16-18 and for females 15-17. Objectives are to optimize fitness preparation, the “engine” and optimize skills and performance. Training to train stage objectives should be achieved before introducing this phase of development to an athlete. Training and competition ratio should be close to 50:50. Training part of the fifty should be used in technical and tactical skills and fitness improvements and the other fifty to competition and competition specific training. During this phase overall training is all-year-round and training is often modeled to simulate competition to match the changing environment and psychological requirements. Individual fitness programs are tailored to match the needs of every athlete individually. (Balyi& Hamilton 2004)

From skills training this phase is optimizing sport-specific skills in various situations to meet the demands of competition situations. In this stage the “optimal window of accelerated adaptation” is in elasticity, endurance and strength. Training should involve aerobic and strength training in a ratio to match the demands of the sport. Training should base on the sport analysis of the specific sport and through this train the physical qualities. (Forsman & Lampinen 2008, 415.)

4.5 Training to winstage

This stage is considered for males of 18 and over and females of 17 and over. The objectives of this stage are to maximize fitness preparation and sport, individual and position specific skills as well as performance. (Balyi& Hamilton 2004)

As the final stage of athlete's preparation, all of the physical, technical, tactical, mental, personal and lifestyle capacities should be fully established and the focus of training transfers to higher focus on maximizing the performance. Training is done with high intensity and has high volume. Training and competition ratio is recommended to be 25:75. (Balyi& Hamilton 2004)
4.6 The Retirement stage

Objectives are to retain the athletes for coaching, officials, administration, etc. In this stage athletes have permanently retired from competition and seek for new challenges from different areas in life. They might seek sport-related activities or do something totally different for a change. (Balyi & Hamilton 2004)

Already during the active sports career the athlete should consider what he possibly wants to do after his sports career. When he has made plans in advance, he can safely focus all his concentration and energy on competitions and training as he knows that life goes on after the career also. (Forsman & Lampinen 2008, 238.)
5 Organizing practices for junior teams

With juniors it is important to concentrate on developing overall skills base for future through versatile practice regime and fun games. Versatile training means activities where all areas/parts of skills are practiced. It can be done through one or many sports. Learning and development in different skill parts is the base for learning sport-specific skills in the future. (Hakkarainen 2009, 41.)

5.1 Warm-ups and cool-downs

Warm-up is a part of the ”stress preventing” and supporting training. Proper warm-up opens nutritive and oxidative channels in the body, which allows energy and oxygen flow to the muscles. It also prevents metabolic waste (lactic acid) from piling up and at the same time removes possible previously obtained metabolic wastes. When done well it warms up tissues and wakes up the nervous system for upcoming exercises. (Hakkarainen 2005)

Warm-up should last at least 15min and can be done through various activities such as running, biking etc. During this 15min action the intensity should grow towards the end. Stretching part in this activity should include mostly active stretching. Passive stretching is used at this time only to check the range of motion. Duration for these stretching moves should last only 5-10 seconds. When warm ups and cool downs are repeated continuously, they partly compensate aerobic training. For example 10x15min session is already 150 minutes of aerobic training. (Hakkarainen 2005)

Cool down is for recovering the body from training and one part is the removal of metabolic wastes, lactic acid. Optimal way in removing lactic acid after training is to start with average intensity, approximately 65% of VO2 max. for few minutes. This removes lactic acid from the muscles to the blood. After this low intensity activity, approximately 35% of VO2 max., should be continued for 20-30 minutes. This part of the cool-down circles the lactic acid from blood to target organs for further removal. (Hakkarainen 2005)
Cool down should take at least 15 minutes by duration with decreasing intensity. When this is repeated continuously it can partly compensate aerobic training. Cool-down can consist of various elements e.g. running, biking and stretching. In stretching the idea is to return the muscle to the resting length. After cool-down it is important to get energy quickly by eating to restore the body’s energy stores and continue the recovery. (Hakkarainen 2005)

5.2 Practice planning

The starting point in planning practices should always be the athlete/player and his goals and needs. In the practice plan coach needs to take into consideration the athletes/players skill level, age, sport and the goals for the athlete. To develop certain skills an athlete needs many repetitions in action. Learning a skill needs roughly 10000 repetitions and to be able to perform it in a changing environment the athlete needs roughly 100000 repetitions. The level of the athlete and the difficulty of the skill affects the number of repetitions needed. Most important in these repetitions is quality and the coach should define the most important quality factors when planning practices. (Forsman & Lampinen 2008, 412.)

The coach needs to think how to use the time available in the most effective way for the players. Here are few steps the coach can follow in the planning process:

1. Set overall goals. These goals lie behind the coach’s own philosophy of hockey and the desired results he wants with his players. Coach should try to think what experiences the players want to get out of hockey. Also the coach needs to consider the requirements of his club. He needs to know what kind of players the club wants to develop and is the playing recreational or competitive.

2. Set specific goals. These goals must be realistic, achievable and measurable. These goals need to meet the demands of skill progression defined in the club or by the coach. Coach needs to consider the players level; physical ability, interest, skill, fitness level and motivation when setting these goals. Also physical resources must be thought
through, meaning physical space, facilities and equipment. One example can be that the coach sets a goal to a practice where he wants the players to learn how to break effectively. Coach needs to think for example how big the group is, how much time he has, how big area he has, what is the level of the players at the very moment, how long they might be motivated to practice this skill and can this skill be practiced through different fun games. After considering these things through he needs to evaluate how long it takes to learn this skill and how many repetitions it needs.

3. Following the principles of effective practice.
   a) Keeping everyone active and trying to maximize this activity time among all players. 
   b) Giving clear and concise instructions improve learning, when players really understand what is expected. 
   c) Create progression inside practices and drills by moving from simple skill practice simulation to more game-like drills. 
   d) Giving positive feedback keeps the atmosphere and motivation higher with players. Feedback should be given on both individual and team basis. 
   e) Hold a chart from players’ progress in practices. This improves the motivation of players. Drills should somehow be measured to ensure effectiveness (e.g. record times). 
   f) Notice and allow individual differences. Not all players learn at the same rate. For this drills might need modification and flexibility in some situations. 
   g) Variety in the activities increases motivation and learning. Short instructions can keep the motivation rather high with juniors. 
   h) Plan the practices for maximum use of resources. Try to use the whole ice surface effectively and keep the drills fun and stimulating. 

(IIHF Level 1 coaching material, 2010. Practice planning.)

A single practice plan is a precise and concrete description of what the practice holds inside. Goals of the practice should be involved to know which qualities the practice develops. Precise practice plan holds inside the whole session from warm-up to cool-down. The plan should have content, moves, duration, drills, intensity levels, repetitions, recovery and the order of completion and speed of completion. (Forsman & Lampinen 2008, 413.)
6  Effective communication & teaching techniques

Sports and exercise leadership includes decision-making, motivating of participants, giving feedback, establishing interpersonal relationships, and directing the group or team confidently. A leader knows how a group or team is doing and provides direction and resources to help it reach its goals. Coaches not only provide the team a vision or goals to be achieved, he guides the team in day-to-day basis giving the structure to the doing, motivation and support for the team. Best leaders strive towards to maximize the opportunities and performance with all participants of the team. (Weinberg & Gould 2007, 206.)

Leadership is a group phenomenon and it is goal-oriented. Leaders influence and motivate others to reach their goals. Leadership brings some form of hierarchy to groups. Major leadership traits are integrity, self-confidence, intelligence, determination and sociability. (Northouse, P. G. 2007)

6.1 Effective Communication

Communication is a critical element in sports. It does not matter how well a coach manages in planning work and creating strategies; success still depends on his ability to communicate not only with players, but also with officials, team management, other coaches, media, parents. It is not enough for the coach to know all aspects of the game and training, he needs to be able to efficiently communicate this information to others. Often the problem in communication between coaches and players is that the coaches assume the players understand them fully even when giving only small gestures and comments. This type of ineffective communication may lead to disagreements and individuals to dislike each other. (Weinberg & Gould 2007, 228.)

Communication occurs in two different ways, interpersonally and intrapersonally. Communication, which involves at least two people and meaningful exchange, is called interpersonal communication. An important part of interpersonal communication is non-verbal communication or non-verbal cues. People are often unaware of the multiple cues they use in communicating. Estimations from various researchers show that
50% to 70% of the information shared is non-verbal. Understanding the various types of non-verbal communication improves sending and receiving messages. Non-verbal messages are often not under conscious control and therefore harder to hide than verbal messages. For this reason coaches need to be alert and observant of their non-verbal cues. These cues have a huge impact on players. (Weinberg & Gould 2007, 230-232.)

Coaches communicate many messages to the players by facial expressions, body position, use of hands, overall posture and voice characteristics. The coaches non-verbal cues should reflect on the verbal messages sent out and this behavior should be consistent. (IIHF Level 1 coaching material, 2010. Communication principles.)

A hockey coach needs to be able to communicate to his players as a team, in subgroups (e.g. forward line) and as individuals. In the following list there are some principles how to establish good communication with the team:

1) Being an enthusiastic leader affects your players’ enjoyment towards hockey.

2) The coach is always seen as an example from the players’ eyes. Positive interaction with the players sets a good example of desired behavior. Rather than yelling all the time, it is important to encourage players frequently.

3) Coach needs to clearly bring out the expectations of the players. The coach needs to be demanding, but at the same time reasonable and create the expectations based on players’ abilities and experiences.

4) The coach needs to be constant in his communication with the players. Discussing player’s progress, game and practice performance frequently keeps motivation high. If communication is random with the players and not happening with all the players, confusion might arouse among the team and the coach might lose respect of some players.
5) By art of listening the coach shows true interest and care towards the players. Active listening by holding straight eye contact and nodding conformingly shows the coach that the player really listens and also understands the message.

6) Good posture and clear voice shows a sense of control and self-confidence. Coach needs to learn to use both of them effectively to show his leadership. Coach should speak very clearly and make eye contact to players when speaking. The voice’s quality often betrays true feelings, moods and attitudes, retrieving what we might never state verbally.

7) Positive and informative feedback gives the best response from the player. Instructions should be clear and precise. When correcting a skill, the player first needs to know what part is done correctly. Then comes the correction of the error and in the end coach should reinforce and encourage the player to perform this skill.

8) To create a positive team atmosphere it is very important to explain the contribution of each player to the team and it is a good start in teaching players to support their own team and sportsmanship when playing.

9) Coach should try to treat all players as individuals. Coach should talk to each player individually at least once during each game and practice. This makes the players feel that they are part of the team, they are noticed of their own actions and they are treated as individuals. By learning and remembering all players’ first names and keeping a file of each player makes this communication easier.

(IIHF Level 1 coaching material, 2010. Communication principles; Weinberg & Gould 2007, 233-234.)

6.2 Teaching Techniques

Individuals acquire skills in different pace, in a different way, for different reasons and in a different order. Basis for teaching is to acknowledge the level of maturation, previous knowledge/skills and the needs that the players have. Building a motivating at-
mosphere and getting the players interested in learning are important tasks for the coach to accomplish. (Hiltunen & Huhtinen 2004, 4.)

Skills practice is very important especially in youth. Through versatile training in childhood the youngster has developed a wide range of skillset and a good base for learning sport specific skills in the future. In youth basic skills are still trained but the emphasis shifts more to sport specific skills training. (Forsman & Lampinen 2008, 120.)

Learning a new skill starts with perceiving the performance. Visualizing the performance by the coach, a player or from a video is an effective way to show the basic idea of performing the skill. The player needs to get a thorough understanding of the skill about to be learned. In the beginning the player creates his way of performing the skill. There are a lot of errors at start and this requires feedback from the coach. By correcting these errors and performing many repetitions the skills begin to develop in a right way. (Forsman & Lampinen 2008, 435-436.)

After multiple practices and repetitions, the more “rough mistakes” begin to decrease inside performing the skill and the performance becomes smoother. From here the skill should be performed in changing situations in a changing environment for example going through different tracks and different drills. The last stage of learning the skill is when it becomes automatic and easy to perform in different situations. To master the skills player needs constant training in challenging situations with faster speed and quality. (Forsman & Lampinen 2008, 435-436.)

When planning a practice, thinking about what skills to teach and when, the coach needs to keep in mind few basic things of teaching a skill/technique:

1) Coach should teach only skills what players can handle. Teaching a too hard skill for players can be discouraging and decrease motivation. If the skill performed is too easy, the players will become bored. It is coach’s responsibility to define skills that are challenging enough for the players e.g. by testing all players on the ice.
2) Teaching a new skill should always take place in the beginning of the practice when the players are fresh and alert and ready to acquire new things. In the end when fatigue steps in, the players will have difficulties to acquire anything new and demanding.

3) Progressing from simple skill to more advanced gives the players a sense of accomplishment, when they realize their own improvement, for example learning a skating skill first without the puck and then with the puck.

4) New skills require multiple repetitions and should be done constantly in practices. The coach should be creative to keep practices motivating enough, as practicing one skill again and again for a long time without any change can not only become boring for players but also decrease motivation and learning.

5) Correcting errors through demonstration and constructive and positive feedback is important. At least major errors should be corrected in the early phase of learning the skill. It can be very hard to change wrong techniques later.

(IIHF Level 1 coaching material, 2010. Teaching techniques.)
7 Empirical part

7.1 Project Planning

Discussion about the project started in December 2009, when the Asian Sport Development Manager Jukka Tiikkaja, came to evaluate the needs of UAE’s hockey on the moment. After discussing the general situation he put out an idea of creating a coaching education program to Abu Dhabi to fulfill the coaching need and quality. Almost all helpers/instructors on the ice, except my colleague and me, were untrained and inexperienced in coaching, mostly fathers of the hockey school players. For this reason we concluded that it would make practice sessions more effective if we had coaches with more knowledge to help on the ice. After these meetings in UAE I saw Jukka, next time in Taipei, in IIHF Asian Challenge Cup 2010, where I participated in a coaching conference for Asian countries. This coaching conference reinforced the fact that this kind of program is needed in all Asian countries.

After Taipei conference I defined the structure of the program. The program was to be based on specific learning objectives, where all learned will be tested and through this the outcome would be practically competent coaches.

After defining the structure I started to plan the content of the program. The content had to support the needs and current situation of hockey in Abu Dhabi. Ice hockey is new, developing sport in UAE compared to bigger hockey countries. The structures of working organizations are being built and the start was a bit confusing. New players were taken to all age groups in 2009 from skating school to U18 teams in Abu Dhabi, where the biggest development program is on progress. The level 1 coaching education program needs to be clear from the content, simple to understand for novice instructors and the actual clinic to be short enough to wake up the interest in all participants. Level 1 program will be an all year round on-going program with pre-task assignments, clinic and post-task assignments with follow-ups and evaluations. The actual clinic will go through basics of coaching in juniors, how to organize efficient practice session, how to control a group and give feedback, technical main points in beginners skating,
forward/backward skating, basic stickhandling, fun games, basics of warm-ups and cool-downs and basic facts of healthy nutrition. With these areas to cover the coaches will get a startup package to start coaching in a short period of time and they will be evaluated throughout the season to see their own development. Knowing practically to apply this information after the clinic will increase the efficiency of the schools practices and the training sessions will become more interesting also for the players. Goal was to maximize the active time and the right progression in skills learning with the limited ice in Abu Dhabi.

7.2 Project Implementation

First I created the framework of the program. I created a three level table, which involved the learning objectives for all three levels. The program is planned to include three levels of coaching, but in my work I complete the package for first level education. Then I broke down level 1 to smaller parts and created a table, that shows learning objectives, teaching methods and evaluation methods. These learning objectives were defined based on my evaluation of the current need of coaching education in Abu Dhabi and current need for player development. My evaluation based on the skill levels of the teams, the previous experience and knowledge of the instructors and the direction we wanted to take in player development in the club.

For this season, 2010-2011, one of my responsibilities was to be the National Coaching Instructor for the association and work with this program. I included two of my colleagues, Janne Salmela (Assistant coach of Abu Dhabi Storms) and Matti Fagerström (Head coach of U15 and U18 teams and assistant coach for AD Storms) to this work and asked them to help me in starting to build the material. I appreciate highly their help as they started with some of the material and then moved on to their own thesis projects. With their help it was easier for me to continue producing all the material.

After starting to build the material I started to plan the actual implementation of the coaching program. When the material was completed I created written test parts to enable the evaluation part of the coaching clinic. I made a final written test that would be evaluated and the rest of the testing is done by evaluating practical sessions and
written assignments done by the coaches. After creating the tests according to the ma-
terial and contents I made instructions to evaluate the results of the tests. With the
evaluation system done I continued to produce an example schedule for the coaching
clinic with details to give a clear and guiding view how the organizer will hold the clin-
ic. With this part I made lesson plans for all practical sessions to be held during the
clinic to make it easy for the organizer to manage all practical sessions.

After all material and plans were produced I made the follow-up section to describe
how the development of the coaching skills should be continued. It is not enough that
a new coach goes through one clinic and then moves on straight to actual coaching
without any follow-up.

7.3 Project Assessment

I finished out with a ready level 1 coaching education package that can be held as a
coaching clinic and education tool for new coaches in Abu Dhabi.

My most challenging goal was to build the coaching education level 1 clinic package in
the shape that would be clear and easy enough to understand and follow by any organiz-
er holding the coaching clinic and follow-up. The clinic’s goal was to be effective and
short enough to get more coaches to commit to the education in the future. I finished
with a schedule for four days where all the material would be gone through and all
practical sessions would be held with testing and evaluation. These four days are di-
vided to three different weekends that include self-studying and assignments. The ma-
terial and power point shows are made as blank background without effects, because
all presenters and lectures have their own ways of highlighting and reinforcing their
presentations. It is up to the lectures to decide what kind of visual effects to add to the
presentations. This way it is also easier to share the presentation e.g. with other associa-
tions, who can then add their own logos to the materials.

I had four coaches who went through the program material and I’m satisfied with the
feedback I got from them. The structure is clear enough, what makes it easy for the
organizer to finalize the implementation of the actual clinic in the future.
The clinic material is given to the coaches in a memory stick for self-study as a source for material that goes deeper in coaching juniors. The handout material includes also this written part of the thesis, which furthermore gives a better understanding and knowledge for junior coaching and the situation and needs for Abu Dhabi ice hockey development.

It is to be seen who will use this program, in which format and when will the program be launched, because the development of hockey is still scattered to too many separate plans in Abu Dhabi and there is no clear goals that are in mutual understanding by the technical side of the club and the highest management of the club. Too much is expected to happen in too short period of time in player development by the highest management without understanding the facts that lie behind player development. Inside this program the lecturer, possibly the national coaching instructor, can reinforce the goals of the clubs player development by directing the new coaches in the wanted way.

When I was building this program, discussing with people, I realized how important goals are in an organization. With a clubs own program these goals can be easily reinforced and the coaches can be given a clear idea where to aim with the practices and development. If a club doesn’t have clear goals, that everyone knows well and follows in everyday work with the same mindset, the result will not good. Then everyone will do their own things, create their own ideas and goals and conflicts arise e.g. with monthly reviews of practices. Vision and goals are very important elements in a clubs overall development, but they are often forgotten in everyday work and they are not reinforced often enough.
8 Summary and Discussion

The idea of the whole project from the beginning was to develop a coaching education program to the Emirate of Abu Dhabi, which matches the needs of current situation of development in ice hockey as a new sport in Abu Dhabi. This first level clinic and program I built up is targeted for old Emirati players and hockey parents that have no experience in coaching and who want to coach junior age groups in Abu Dhabi Ice Hockey School.

The level 1 clinic and follow-ups are designed to be yearly, targeted for new-inexperienced coaches. The clinic covers all basic skills needed to be able to efficiently instruct and coach beginner skaters from skating school up to U12 teams. The material in the written manual provides information of basics in junior coaching, development of a young player in childhood, long-term athlete development model, organizing practices and basics in leadership and communication. The long-term athlete development model gives a general understanding for the coaches about a player’s development throughout his/her career.

The project part, coaching program level 1, goes into details in practice planning, organizing practices, giving feedback, basic technical skills e.g. skating and stickhandling, warm-ups and cool-downs and nutritional facts. After completing level 1 program the coach should be practically capable to plan and organize efficient practices for young age groups in Abu Dhabi Ice Hockey School with a content that fosters the kind of players the club wants to. Use of positive and fun approach is highly involved in the schools mentality to provide enjoyable experiences to young players and to lengthen their sports activity.

From the feedback I received from my colleagues in Abu Dhabi Ice Sports Club, who went through the clinic material and instruction packages, I believe I was successful in creating a level 1 program that matches the needs of the new coaches in the school for next season. The instructioning should be clear enough for the clinic organizer to make
the final schedules and plans to hold the clinic in Abu Dhabi in the beginning of season 2011-2012.

I hope the coaching education program is further on developed and used in Abu Dhabi as I made the framework and learning objectives for three levels of coaching education. Next step for the next National Coaching Instructor is to start building the level 2 materials, instructioning and plans to continue the education with the coaches. Best outcome would be to have the level 2 program ready for season 2012-2013 to take the quality of coaching again to a better level and to have more competent coaches to help the sport to develop and grow in Abu Dhabi and UAE.
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Appendice 1

Content of the memory stick: Coaching education program level 1 for UAEIHA

1. Before the clinic for the organizer
   a. Hand-out material
   b. Instructions

2. Clinic lecture material
   a. Introduction for the program
   b. Effective feedback
   c. Practice planning
   d. Skating
   e. Warm-up & Cool-down
   f. Nutrition and rest

3. Hand-out material for self-study
   a. Before clinic hand-out
   b. Beginning of clinic hand-out
      i. IIHF coaching material
      ii. Readymade warm-ups
   c. After clinic hand-out
      i. Clinic lecture material
      ii. Thesis theory part

4. Lesson plans for practical sessions

5. Assignments, test material & evaluation material

6. Daily clinic schedules

7. Follow up – post tasks