DRsU

Roller Speed Skating

Coach Education Program

www.dkrul.dk/hurtiglob www.dif.dk

Danske Rulleskoejter Union

National Director of Coaching: Sutton Atkins, sootythirtythree@hotmail.com
National Coaching Panel: Sutton Atkins, Rune Soeltoft, Jens Norremark, Kim Hansen.

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"You only ***achieve*** what you ***believe***"

Introduction

The Roller Speed Skating Coach Education Program (RSS CEP) was written and implemented in 2003 in response to the demand for a higher standard of coaching and the emergence of new clubs demanding basic coach education.

Although Danske Rulleskojter Unior (DRsU) does not require any mandatory level of qualification to organise a club training session at the present time, it is planned in the future to implement such a requirement. The date and details of implementation will depend upon the quantity and quality of coaches in and around clubs in the future.

The CEP comprises a 'club introduction' level followed by 5 coaching levels. Club Introduction level is voluntary. Level 1 of the program is run by DGI. Level 2, 3, 4 are predominantly weekend based courses. Level 4 requires some independent study. Level 5 requires a lot of independent study and a large research project for high level coaches.

The Courses comprise of units each taken during the weekend of the course. At level 1 DGI is responsible for pass or fail. At level 2 and 3 informal testing and observation of coaching skills, skating skills and theoretical knowledge is undertaken by the course leader. At level 4 and 5 stringent criteria for passing the course are observed. A written exam and formal observation of coaching planning and delivery will be undertaken. Skating skills will be informally observed.

It is strongly recommended that coaches take extra courses between levels as they work their way up through the 5 CEP levels. This will supplement the education that the CEP provides. Some courses and background reading are recommended within the CEP, but the list is by no means exhaustive.

Prior to level 4 and level 5 it is required that the coach be under a mentor coach and signs a log book to show mentored coaching and continued development in between coaching courses. This will mean that coaches are not just highly educated, but are EXPERIENCED, which we feel is one of the most important aspects of a good coach.

The whole CEP is designed to teach you how to:

- Implement appropriate teaching methods
- Communicate effectively with your athletes
- Understand the learning process and training principles
- Use the various coaching styles
- Advise athletes on track safety
- Reduce the risk of injury to your athletes
- Recognise the causes and symptoms of over-training
- Prepare training programmes to meet the needs of each athlete
- Assist athletes to develop new skills
- Use evaluation tests to monitor training progress and predicting performance
- Develop the athlete's energy systems
- Direct athletes on their nutritional needs
- Advise on relaxation and mental imagery skills
- Advise on the use of legal supplements
- Evaluate athlete/training and athlete/coach performance

Overview of DRsU Roller Speed Skating Coach Education Program

www.dkrul.dk/hurtiglob/hurtigside.html www.dif.dk

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RSS Level	Coaching Principles and Management	Fitness and Training	Sports Psychology	Requirements
RSS Club Int. 2-5 hours	General Introduction depending upon club needs. DRsU info. Race videos.	Info to fit club needs. Welcome to the sport. Fun training for efficient development.	Tool box of Games. Rational for coaching. Philosophy of club?	DRsU Club Registration
RSS1 Leaders Award	DGI Coach Education Roller Skating Level 1 - Ready in May '04 www.dgi.dk/rulleskoejter/motionister			
RSS2 Ass't Coach 2 days	Coaching Children Communication Improving Basic Skills RSS tec vs Motionister tec Club Responsibility Child,1staid,Variety,Range	Basic fitness + training Basic physiology Planning a session	Motivatin ChildrenvAdults Goal setting. A to B	3 months @ RSS1 Must be able to skate Must be 16 yrs old
RSS3 Coach 2 days	Evaluating your coaching Video analysis Observational analysis Basic mechanics Injury prevention	Periodization + planning Nutrition + fuel Core training + stabilization Cross training	Goal Setting Mental modelling Mental toughness	6 months @ RSS2 Good skating ability (Assessed)
RSS4 Senior Coach 4 days	Athlete life balance Performance profiling Coaching the elite Track skills unit Sprint training	Adv'd strength training Advanced power training Advanced endu. training	Bulding confidence Handling pressure Imagery	1 year @ RSS3 Advanced skating ability Iasaf fitness trainer National level coaching exp 6 months under a mentor coach once a week.
RSS5 Master Coach Longterm Mentored Research + Development	Team tactics Team organisation Team training * Research project of your choice. Validated by Nat. Director of Coaching	Fitness testing Advanced physiology	Jorn ???	2 years @ RSS4 Bachelor i Idrætsvidenskab Int'l competition experience Min. 1 yr with Nat'l team Involved in delivery of RSS 1 - 3 + Show outstanding signs of delivery organisation and planning.

RSS Club Intro (2 - 5 hours)

Welcome to the sport. General Introduction Info depending upon club needs.
DRsU/Club Membership required
History of Sport + DRsU. Contempary Sport, EM, WM, SIC, WIC, USA Indoor.
Future plans and development of DRsU
Contacts at DRsU… (also nearest established club and contact)
Development of a Social skate night in the locality.
DK Races, GP, Bornholm, HCA Marathon, DM. - Video
Referee Courses, National Squad, DRsU Roller Speed Skating Coach Education Program
How to run a training session… Skate basics, FUN, safety. demo from Elite skaters.
Suggested reading/websites.

Frequently Asked Question:

If you have been coaching for many years do you still need to participate in the Coach Education Program?

The short answer is YES! … but, within the RSS CEP automatic upgrade processes are included, based on prior knowledge, experience both practical and theory. This must be applied for through DRsU and the National Coaching Panel then assess the application set against criteria. However, even the National Coaching Panel attend RSS1 and RSS2 courses to refresh their basic understanding of teaching, pedagogy, sport psychology and technique.

Roller Speed Skating 1 (RSS1) - Leaders Award

DGI Coach Education Roller Skating Level 1 - Ready in May '04
www.dgi.dk/rulleskoejter/motionister
Suggested courses to attend before RSS2…
Resources from DRsU ? and from DIF ? and DGI ? DIF +45 43 26 26 26

Suggested reading/websites/courses

http://www.ots.dk/index_ie.htm - klik on kurser/konferencer

Roller Speed Skating 2 (RSS2) - Assistant Coach (2 days)

RSS2 is aimed at either; 'Leaders' who are interested in assisting a qualified Speed Skating Coach, or people coaching improving fitness skaters. RSS2 consists of coaching technique and teaching styles - how to assist, motivate, correct and feedback in a positive way, inspire etc. The coach must be at least of good 'fitness skating' ability. This will mean the coach will be better or just as good as the students they are coaching. The coach will be trained in observation/interpretation of many of the most common mistakes the students will make, and should be able to show the correct way to skate. Introduction to setting and achieving individual goals - difference between different types of goals. The coach will in the course improve his/hers own skating abilities.

RSS2 may overlap with RSS1 (DGI Coach Education Roller Skating Level 1) This offers a good chance for revision, further questions regarding your experiences since you have completed RSS1. Also to see and use the theories learnt at RSS1 in a Speed skating environment as opposed to a general skating environment.

Students will need to bring; skates, helmet, (pads if desired), pen and paper, a video camera to record some of the course is advisable.

- **Requirements:**

DRsU/Club Membership
3 Months Coaching at RSS1
Must be able to skate.
Must be 16 years old.

- **Introduction**

The coaching panel.
Intro the group. Ice breaking: talk about your partner.
Expectations of the course?
Have you attended any of the courses 'recommended' after RSS1? …
DIF / DRsU resources (Booklets and info.)
Ice breaker 2: single words to describe coaching and coaches attributes.
Coaches Role: the role of the coach is to create the right conditions for learning to happen and to find ways of motivating the athletes.

- **Coaching Children**

General Motivation of skaters - They started skating for fun and friends!
Motivating children, demonstration, modelling. (adults: informative and theoretical approach)
Classroom activity: In small groups. Design a 'game' for kids to play that will create an environment that will mean they will learn a specific skill. To be used later, practically.

- **Communication / Teaching Styles**

Autocratic Style - Telling

- The coach decides on what is to be done

- The athletes are not involved in the decision-making
- The coach defines what to do and how to do it

Autocratic Style - Selling

- The coach decides on what is to be done
- The coach explains what is required and the objectives
- The athletes are encouraged to ask questions to confirm understanding
- The coach defines what to do and how to do it

Democratic Style - Sharing

- The coach outlines the training requirements to the athletes
- The coach invites ideas/suggestions from the athletes
- The coach makes the decision based on the athletes' suggestions
- The coach defines what to do and how to do it

Democratic Style - Allowing

- The coach defines the training conditions
- The athletes brainstorm to explore possible solutions
- The athletes make the decision
- The athletes define what to do and how to do it

FOUR ALTERNATIVE COACHING STYLES

1. Command style - direct instruction, coach dictates
2. Reciprocal style - athlete takes some responsibility for their own development - monitored by the coach
3. Problem solving style - athlete solves problems set by the coach
4. Guided discovery - athlete has freedom to explore various options

Communication continued…

Tone and style? Serious or fun? Clarity, One clear learning objective.
Positive feedback, when and where? Body language, sense of humour.

- Do I have the athlete's attention ?
- Am I explaining myself in an easily understood manner ?
- Has the athlete understood ?
- Does the athlete believe what I am telling him/her ?
- Does the athlete accept what I am saying ?

Before communicating with an athlete, coaches should consider:

- WHY they want to communicate
- WHO they wish to communicate with
- WHERE and WHEN the message could best be delivered
- WHAT is it that they want to communicate
- HOW they are going to communicate the information

Effective communication contains six elements:

- Clear Ensure that the information is presented clearly
- Concise Be concise, do not lose the message by being long winded
- Correct Be accurate, avoid giving misleading information
- Complete Give all the information and not just part of it
- Courteous Be polite and non-threatening, avoid conflict
- Constructive Be positive, avoid being critical and negative

LISTEN!

- **Improving basic skills**

Whole Practice

Ideally a skill should be taught as a whole as the athlete can appreciate the complete movement and execution of a skill. The whole method of instruction can sometimes mean the athlete having to handle complex movements e.g. the whole high jump technique.

Part Instruction

When a skill is complex or there is considered to be an element of danger for the athlete, then it is more appropriate to breakdown the complex movement into its constituent parts. The parts can then be taught and then linked together to develop the final skill. When part instruction is used it is important that the athlete is demonstrated the whole skill so that they can appreciate the end product and understand how the set of parts will develop the skill.

Whole Part Whole Instruction

Initially the athlete attempts the whole skill and the coach monitors to identify those parts of the skill that the athlete is not executing correctly. Part instruction can then be used to address the limitations and then the athlete can repeat the whole skill with the coach monitoring for any further limitations. No one method is suitable to all occasions, but studies have shown that:

- Simple skills (and perhaps 'simple' is relative to each individual) benefit from the whole method
- Skills of intermediate difficulty benefit from the part method
- Closed skills are often taught with part instruction
- Difficult skills are best dealt with by oscillating between part and whole

Skating skills - Understanding Movement/Technique

Speed skating technique vs Motionister technique.
Basic Technique
Skating Games (The value of hockey etc.)
Circles
Edges+ body weight transfer
Body position
Disaster circles
Racing line (step off wall)
Cornering technique on rink
Starts, Duck walk

Including observation and correction
To include a session of improving the coaches skating ability, while analysing and evaluating each other.
Group to discover… 'The Common mistakes of the skater'.

The students will also have to analyse an elite skater. (e.g. What is Rasmus's secret?)

- **Club responsibility**

Child protection, First aid, Safety.
Advantages of Club variety and range.
Why do your elite skaters need a big club?
Advantages of a large club:

Better finance
More influence leads to more hall time and better facilities.
Bigger talent pool.
More even ability in training groups for better quality training and easier coaching.
More chance of top skaters being pushed to train harder.
Less 'mental boredom' and repetition in training.
Better atmosphere at training, more friends.
More publicity, leading to better finance.

Who is responsible for 'new membership' in your club?

- **Basic fitness and training (basic physiology)**

Basic Principles: Specificity, Overload and Reversibility.

Demands of our sport?

Marathon 98% Aerobic 2% anaerobic for runners… what about skating.

Strength - the extent to which muscles can exert force by contracting against resistance (holding or restraining an object or person)

Power - the ability to exert maximum muscular contraction instantly in an explosive burst of movements (Jumping or sprint starting)

Agility - the ability to perform a series of explosive power movements in rapid succession in opposing directions (ZigZag running or cutting movements)

Balance - the ability to control the body's position, either stationary (e.g. a handstand) or while moving (e.g. a gymnastics stunt)

Flexibility - the ability to achieve an extended range of motion without being impeded by excess tissue, i.e. fat or muscle (Executing a leg split)

Local Muscle Endurance - a single muscle's ability to perform sustained work (Rowing or cycling)

Cardiovascular Endurance - the heart's ability to deliver blood to working muscles and their ability to use it (Running long distances) Aerobic capacity.

Strength Endurance - a muscle's ability to perform a maximum contracture time after time (Continuous explosive rebounding through an entire basketball game)

Coordination - the ability to integrate the above listed components so that effective movements are achieved

Q. Body weight is supported by muscles and skeleton… so what?

- **Planning a session**

To include your 'basic skills' game that you designed earlier.
More Skating Games, DRS senior.doc, Gyrations
Including a 'coaching evaluation' session where the student assistant coaches will be in a practical session coaching their piers.

- **Goal setting**

Types of goals and uses? Result oriented, process oriented.
Long term, medium term, short term.
Must be low level, fun goals and 60 – 70% achievable.
Not serious at this level of skating ability. Goals are there to motivate and focus their energy and to give a sense of achievement and satisfaction after a period of "hard work"

SMARTER

S - goals must be Specific
M - training targets should be Measurable
A - goals should be Adjustable
R - goals must be Realistic
T - training targets should be Time based
E - goals should be challenging and exciting
R - goals should be recorded

- **Summary of the course.**

Group activity to recall and list on paper all major points that course have covered in the past 2 days.
Suggested courses to attend before RSS3…
DIF / DGI
"DIF Home study packs" or "DIF Coaching Children Workshop" or "DIF First Aid course" or "DIF Fitness for Sport Workshops".

- **Suggested reading/websites.**

Roller Speed Skating 3 (RSS3) - Coach (2 days)

RSS3 is aimed at either; Assistant Coaches who are interested in gaining full Coach qualification in order to then possibly progress to higher levels, or an Assistant Coach who wishes to take a larger role in their club coaching.

RSS3 consists of coaching technique and teaching styles coaching technique maybe through knowledge sharing knowledge and experience with other coaches. The coach should learn how to introduce basic and more detailed speed drills, start to understand the background for the drills, be able to give advice on individual "home work". Be able to make a program that will be followed for some months. Learn how to make the first individual programs for each skater. Be able to put together a program that is fun and motivating for a night of training, with a variety of drills at his disposal.

The coach's skating ability must improve for this level of coaching. The skaters that the coach will be coaching will be of good standard. We do not require the coach to become an expert skater, but being able to offer a demonstration of correct technique is very valuable. We will however offer strategies for the occasions where the coach is not able to offer an adequate demonstration. This will mean the coach is often equal or lower in skating ability than the skaters. The coach will be trained in observation/interpretation of major and minor mistakes the students may make, and should be able to show the correct method to rectify these mistakes. The coach will in the course improve his/hers own skating abilities a good deal.

RSS3 may overlap with RSS2. This offers a good chance for revision, further questions regarding your experiences since you have completed RSS2. Also to see and use the theories learnt at RSS2 in a Speed skating environment as opposed to a general skating environment, and offers chance for you to ask questions about observations you may have made while watching Senior Coaches at work.

Students will need to bring; skates, helmet, (pads if desired), pen and paper, a video camera to record some of the course is advisable.

- **Requirements:**

DRsU/Club Membership
6 Months Coaching at RSS2
Good skating ability. (Assessed)

- **Introduction**

The coaching panel.
My experiences from writing this program.
A Realization of the differences between coaching the elite and the club.
Intro the group. Ice breaking: talk about your partner.
Expectations of the course?
Have you attended any of the courses 'recommended' after RSS2? …
DIF / DRsU resources (Booklets and info.)

- **Basic mechanics**

Advanced Understanding of Movement/Technique
Technique discussion and analysis of the top skaters.
Stride length vs high Foot cadence
Late passing (1step)

Strong pass
Arm movement
Figure 8s
Straightaways
Flat plant ?
Sprinting
Acceleration
Relay changes
Double push

- **Observational and video analysis**

Analysing Performance.
Practical task, coaches to analyse a skater and report back to the group.
Correct method of video analysis? Class question: How should video analysis be done and what should the feedback say? Immediate, specific, positive (negative sandwich) appropriate to the level of prior learning.

Assessing Performance

Initially, compare visual feedback from the athlete's movement with the technical model to be achieved. Athletes should be encouraged to evaluate their own performance. In assessing the performance of an athlete consider the following points:

- Are the basics correct?
- Is the direction of the movement correct?
- Is the timing correct?

It is important to ask athletes to remember how it felt when correct examples of movement are demonstrated (kinaesthetic feedback). Appropriate checklists/notes can be used to assist the coach in the assessment of an athlete's technique.

- **Periodization + planning**

Annual periodization, macrocycle, minicycle, microcycle.
Weekly/Monthly/ Yearly training load.

> "Athletes who train without a program designed specifically for their personal needs will never reach their full potential. It is essential that the coach and athlete clearly understand the overall objectives of the training program and how each training session contributes to these objectives."

Recovery must do more than simply rest the muscles, reports *Peak Performance*; it must actually move fitness upward. The essentials of recovery include:

1. Repair of the damage which naturally occurs to structural proteins in muscles and connective tissues during a workout;
2. Restoration of the energy producing enzymes inside muscle fibres that are naturally broken down during training;
3. Refilling of the carbohydrate fuel stores within muscle cells, fuel depots which are at least partially emptied during workouts;
4. Return to normal of the endocrine, nervous, and immune systems, all of which are perturbed by a bout of physical training.

You'll learn that muscles should do more than just restore their status quo during recovery periods. Otherwise one would never improve in response to training. Race performance times would be constant, or deteriorate if recovery processes could not even preserve the status quo. The correct training should:

- Repair existing proteins
- Add additional proteins to their overall structure in order to increase strength
- Synthesize greater than normal quantities of aerobic enzymes in order to expand lactate threshold and VO2max
- Store unusual quantities of energy so that the durations of quality workouts can be extended and high quality speeds can be maintained for longer periods of time during your event

Tests also found that athletes who fail to take the right food following their workouts because of sheer negligence or a desire to shed weight are losing out in the long run, because their recovery processes suffer.

What factors can affect performance?

- **Evaluating your coaching**

Pier analysis, observation of Senior coaches in coaching environment, Be observed in a practical situation with written comments, task to teach a specific skill designated by Senior coach.

- **Nutrition + fuel**

Proteins - essential to growth and repair of muscle and other body tissues

Fats - one source of energy and important in relation to fat soluble vitamins

Carbohydrates - our main source of energy

Minerals - those inorganic elements occurring in the body and which are critical to its normal functions

Vitamins - water and fat soluble vitamins play important roles in many chemical processes in the body

Water - essential to normal body function - as a vehicle for carrying other nutrients and because 60% of the human body is water

Roughage - the fibrous indigestible portion of our diet essential to health of the digestive system.

- **DRsU / FIRS Doping Policy**

Regler for brug af astmamedicin. Hvis du træner i Danmark eller deltager i rene danske konkurrencer, er det nok at fortælle en evt. dopingkontrol, at du tager stmamedicin.

Bruger du derimod astmamedicin, og skal deltage i internationale stævner her i landet

eller i udlandet, skal du have et "Medical Certificate". Det er således ikke nok, at ens egen læge har udfærdiget en skrivelse.

Reglerne for udstedelse af dette finder du på hjemmesiden www.doping.dk under Medicin\Medical Certificate. På denne side finder du f.eks. også en ræparatfortegnelse.

På denne side finder du også de adresser, som du skal fremsende din danske ansøgning til, ligesom du kan se hvilke oplysninger, som du skal sende med din ansøgning.

Hvis du er under 18 år skal dit medical certificate fornyes hvert år. Hvis du er over 18 år skal det ikke fornyes med mindre, der sker ændringer i din medicin (nye ræparater).

Man skal således som træner og aktiv være opmærksom på, at dispensationen

(= Medical Certificate) kun gælder i Danmark.

I udlandet og ved internationale konkurrencer i Danmark skal ansøgningen også endes til det internationale specialforbund, idet de kan have andre regler og holdninger til dispensationsproblematikken end DIF.

Skal du have fremsendt en ansøgning til det internationale specialforbund skal FIRS Medication Notification Form bruges.

Husk din egen og lægens underskrift. Formularen fremsendes til undertegnede, der vil sørge for videresendelse.

Erfaringen viser, at ansøgninger skal sendes i god tid forud for deltagelsen i internationale arrangementer.

Du kan også rekvirere en lille folder "Anti-Doping og mig" hos undertegnede.

Mail: ole.knudsen@drsu.dk

- **Cross training including Core training + stabilization**

Intro to Off Skate Exercises What is CORE? What is stabilization?
Injury prevention. Basic Plyometrics.

The aim of core stability training is to effectively recruit the trunk musculature and then learn to control the position of the lumbar spine during dynamic movements.

Training

Having identified the key muscles and how they act, the next step is to establish how best to train these muscles. As with any type of strength and conditioning training, the training protocol for improving the function of the deep-trunk muscles must be specific to the task required. This specificity of training must take into account the type of contraction, the muscle fibre type and the anatomical position required. By definition, the deep-trunk muscles act as "stabilisers" and are not involved in producing movements, but instead involve static, or isometric, contractions. Furthermore, they must act as stabilisers continuously throughout everyday activities as well as fitness and sport activities, and so require very good endurance of low-level

forces. These muscles do not need to be very strong, but they must be correctly co-ordinated and capable of working continuously. In addition, we want these stabiliser muscles to act by holding the lumbar spine in the neutral position, which is the correct alignment of the pelvis that allows for the natural 'S' curve of the spine. These characteristics underpin the following deep-trunk muscle training program.

The basics

Core-stability training begins with learning to co-contract the TA and MF muscles effectively as this has been identified as key to the lumbar-support mechanism. To perform the TA and MF co-contraction, you must perform the "abdominal hollowing" technique with the spine in the neutral position. It is absolutely vital that you perform this abdominal hollowing exercise correctly otherwise you will not recruit the TA and MF effectively.

Getting functional

The ultimate aim of core stability training is to ensure the deep trunk muscles are working correctly to control the lumbar spine during dynamic movements, e.g. lifting a heavy box or running. Therefore it is important that once you have achieved proficiency of the simple core exercises, you must progress on to achieving stability during more functional movements. Try the following two exercises.

Finding your weak nesses

The truth is that there is not a single set of strength exercises that is best for your particular activity. Instead, there are a few best strength training exercises for YOU. That's because you have unique strengths and weaknesses. For each of your weaknesses, there is a handful of strength training exercises that will make you stronger. Your job is to identify your weaknesses and strengthen them.

How do you find your weaknesses?

Certainly, if you're recurrently injured in one part of your body, that area is unnecessarily weak and needs to be bolstered. Or, if you find that you're always breaking down with a variety of different injuries, then you may need to develop basic overall strength (and/or flexibility). On the other hand, if you're seldom injured and have good endurance but need to improve performance, your need is for a resistance programme which will 'teach' those strong muscles of yours to function more quickly. For example, your programme needs to emphasise power training. Sometimes, working with a knowledgeable coach or trainer will help you identify things you should stress during strength training.

- **Mental modelling, Mental toughness + Goal Setting**

Basic sports psychology
Intrinsic/Extrinsic motivation.
Advanced Communication (touching on Psychology)
Goal Setting + Awareness of Int. and National race distances, indoor, track, road.

- **Summary of the course.**

Group activity to recall and list on paper all major points that course have covered in the past 2 days.
Suggested courses to attend before RSS4. DIF / DGI
"DIF Home study packs" or "DIF Coaching Children Workshop" or "DIF First Aid course" or "DIF Fitness for Sport Workshops".

For those planning to go on to RSS4, a discussion about suitable Senior Coach or Master Coach as a mentor for their requirements for RSS4. Information regarding 'Iasaf fitness trainer', Attendance at Nordic Coaching Seminars and National level competition experience.

- **Suggested reading/websites/courses.**

Reinhard Stelter (red) Coaching - læring og udvikling. København: Psykologisk Forlag

Good course but you have to enrol to Kobenhavn University:

http://www.sis.ku.dk/LP/VisKursus.asp?Knr=38403&Sprog=DK&InFrame=0

Roller Speed Skating 4 (RSS4) - Senior Coach (4 days)

RSS4 is aimed at the high level coach who will be coaching elite athletes. Preparing their athlete for national level or international level competition. The Coach may also desire to be involved in planning training and coaching for their club.

Focus on how to make programs, both for the individual skater and for teams. Be able to give detailed advice on cross training - plyo, strength, power, endurance, year planning, nutrition, psychology, intrinsic motivation and methods to promote it. The coach is most likely not at the same level of skating ability as the skaters.

RSS4 may overlap with RSS3. This offers a good chance for revision, further questions regarding your experiences since you have completed RSS2. Also to see and use the theories learnt at RSS3 in a Speed skating environment as opposed to a general skating environment, and offers chance for you to ask questions about observations you may have made while watching Senior Coaches at work.

Students will need to bring; skates, helmet, pen and paper, a video camera to record some of the course is advisable.

- **Requirements:**

DRsU/Club Membership
1 Year Coaching at RSS3
6 months under a mentor Senior or Master Coach (Logged and signed on a time sheet)
Good skating ability. (Assessed)
A Formal Coaching/Sports qualification e.g. (Iasaf fitness trainer)
Attendance at Nordic Coaching Seminars
National level competition experience necessary.
Formal written exam during the weekend.

- **Introduction**

Group discussion based course.
Intro the group. Ice breaking: talk about your partner.
Expectations of the course? Why are you here?
Who do you coach?
Have you attended any of the courses 'recommended' after RSS3?
What additional experience or qualifications do you have.
Advance websites for ice/roller comparison and technique research.

- **Athlete life balance**

Intrinsic motivation and methods to promote it.
Extrinsic motivation.

- **Performance profiling / Performance analysis.**

Here are some examples from the systematic analysis we use to help identify and deal with the causes of poor performance

How much rest did you have before the event? How did you travel on the day and how far? When did you take your last meal before the event? What was your last meal before the event? Did it contain egg, for instance? Did you have your usual warm up? Did you have an event plan? Was this carried out? If not, why not? What did you eat in the past 72 hours? Did you feel tired at all? To what did you attribute this tiredness? Have you suffered recently from pins and needles in the feet and hands, or numbness in the feet? Have you suffered from frequent infections during the past six weeks? If the answer is 'yes' to either of these questions, you may have an important

deficiency in your diet. Did you practise visualisation for the event? This involves being alone in a state of quietness and following the correct sequences

What was your mental state before the event? Being nervous is a natural reaction to being tested, both physically and mentally. Was your nervousness excessive? If so, what technique did you use to overcome it?

Did you feel your training was adequate both in quantity and quality? If not, what facet of it do you think was lacking? If you had some misgivings what action did you take? Have you in your own mind a clear idea of what is required in training for your event? Do you know the physiological breakdown of your event - in other words, what is aerobic and what is anaerobic, what aerobic training involves and what anaerobic?

Are you over stressed in your non athletics life? You may work full-time. Do you consider this a hindrance to your athletics progress? If you feel over stressed how do you pinpoint the stresses and take active steps to reduce them?

Most athletes have a bee in their bonnet about some aspect of their preparation. Have you such a bee in your own bonnet? If so, how do you handle it?

- **Coaching the elite**

- **Advanced technique**

Straightaway step indoor
Double push left leg combo
Timing of foot movement
Extra crossover exit step

- **Track skills**

Indoor, Track, Road circuit and Open Road, specific Level
Outside pass (track)
2nd seem pass (track)
Leadouts
Reading the racing line vs pack line.

- **Sprint training**

- **Advanced strength/power/endurance training**

Further Off skate training/ Core training NASM theory and the Check Institute theory. Advanced Plyometrics.

- **Building confidence**

- **Handling pressure**

- **Advanced Imagery.**

Sports psychology - Mental training.

- **Summary of the course.**

Group discussion to recall and list on paper all major points that course have covered in the past 4 days.
Suggested development areas for individuals.
For those planning to go on to RSS5, a discussion about suitable subjects for the Sports specific research project to be 'outline planned', prior to starting RSS5. Also information about their involvement in delivering RSS 1 – 3.

- **Suggested reading/websites.**

Roller Speed Skating 5 (RSS5) - Master Coach

(Longterm mentored research and development)

RSS5 is aimed … ???

- **Requirements:**

2 Year Coaching at RSS 4 (Logged and signed on a time sheet)
University Sports Qualification (Degree) e.g. (Bachelor i Idrætsvidenskab)
Sports Specific Research project
Attendance at World Coaching Seminars
Minimum1year involvement with a National Team
Involved in Delivery of RSS 1-3.
Show outstanding signs of delivery, organisation and planning.
Including International competition experience
Formal written exam during the weekend.

- **Introduction**

Group discussion based course of ongoing discussion and development and research.

- **Team tactics/organisation/training**

Advanced individual and team tactics, Sports psychology.
Pro team organisation, methodology, preparation for competition, Course and race analysis.

- **Team Psychology**

Jorn???
Advanced Motivation, motivating the elite.
Working with International Level Athletes.

- **Research project (Validated by National Director of Coaching)**

Effectiveness of push off. Recovery phase contribution to power production.
Measurement of 'double-push' contribution to power output in elite athletes.

- **Fitness testing**

Physiological Testing, VO2max, Lactate testing, Joint/complex power production.
Power production through Range of motion testing?

What are the benefits of testing ?

- predict future performance
- indicate weaknesses
- measure improvement
- enable the coach to assess the success of his training programme
- place the athlete in appropriate training group
- motivate the athlete

Tests additionally break up, and add variety to, the training programme. They can be used to satisfy the athlete's competitive urge out of season. Since they demand maximum effort of the athlete, they are useful at times as a training unit in their own right.

Maximal Tests

Disadvantages of maximal tests are:

- difficulty in ensuring the subject is exerting maximum effort
- possible dangers of over exertion and injury
- dependent on the athlete's level of arousal

Submaximal Tests

Disadvantages of submaximal tests are:

- depend on extrapolation being made to unknown maximum
- small measurement inaccuracies can result in large discrepancies as a result of the extrapolation

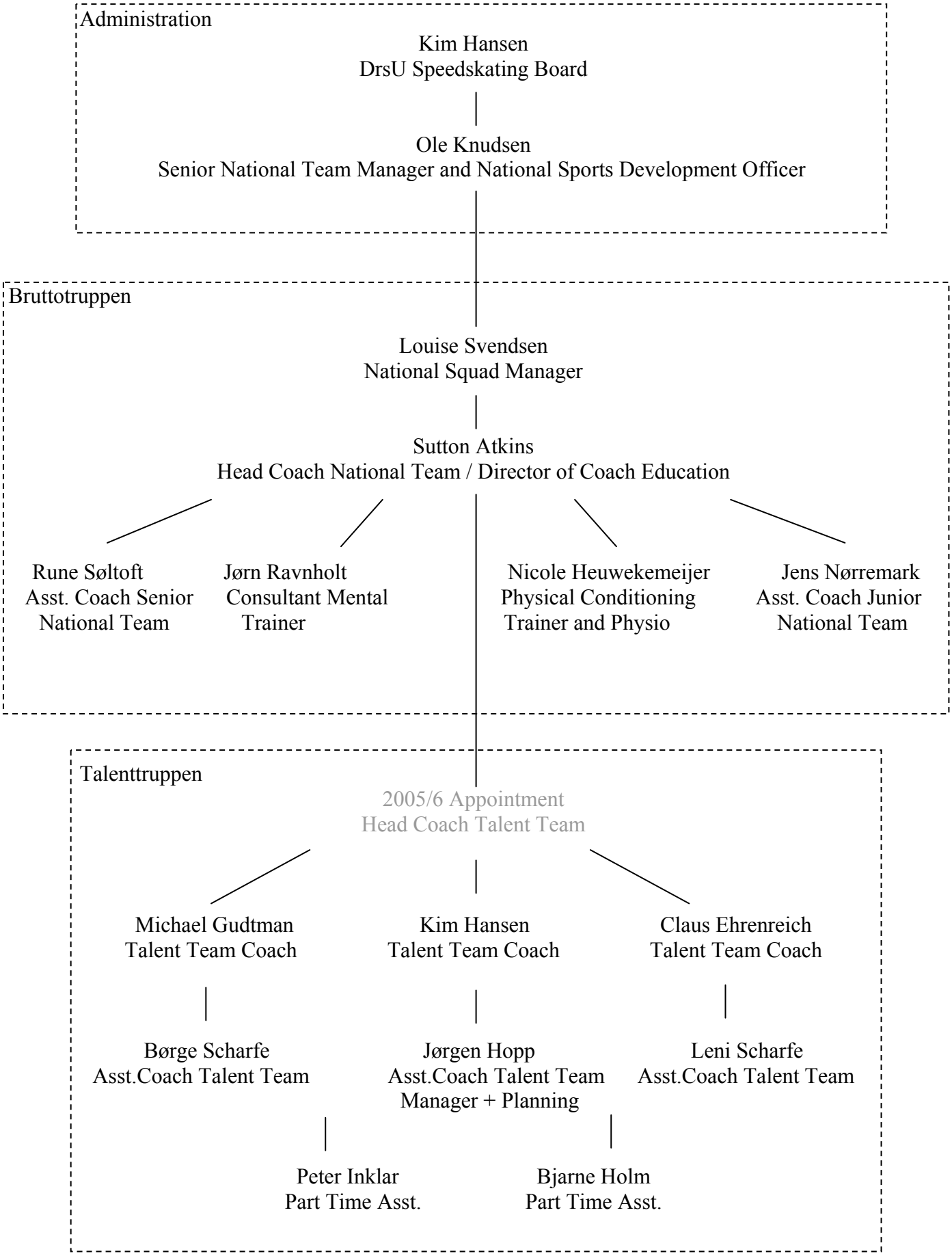
Performance Tests

The following are examples of evaluation tests that can be performed with athletes:

Aerobic Endurance - VO2 max
Anaerobic Endurance
Agility
Body Composition
General Fitness
Flexibility & Balance
Psychology
Strength - Core
Strength - Elastic
Strength - General
Speed and Power

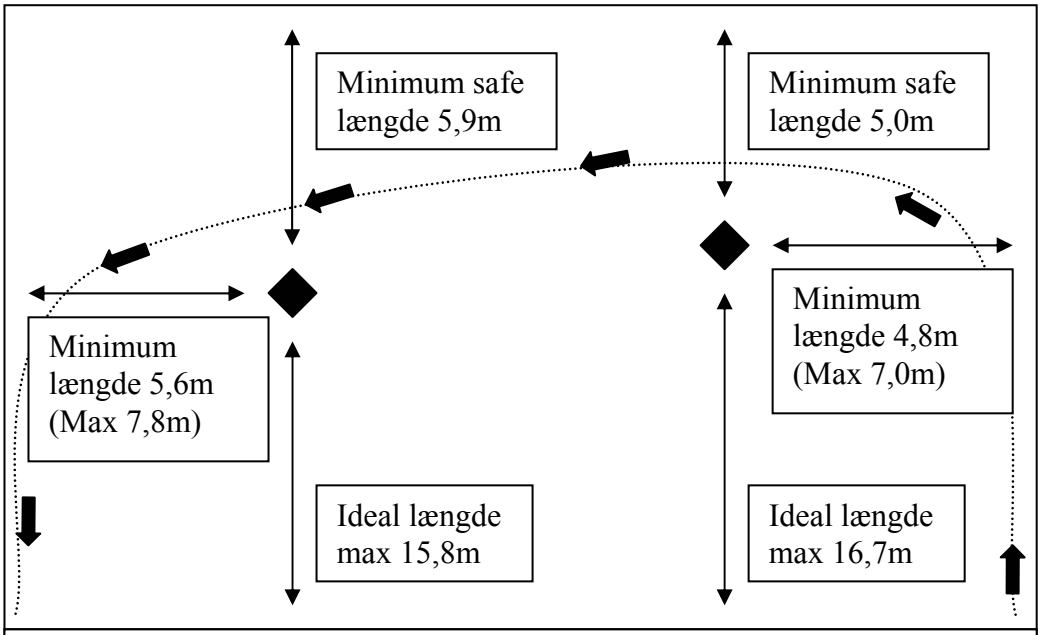
- **Advanced physiology and how it relates to speed skating.**

DRsU COACHING STRUCTURE



- **DK Safety Track**

Ny metode til opmåling af indendørs baner.



- Ovenstående forslag sætter en ny standard for opmåling i danske haller, der passer specifikt til de danske haller. Da de i meget sjældne tilfælde har plads til 100m baner.
- Begge halvdele er identiske
- Nuværende baner ødelægger muligheden for god teknisk kørsel, gode overhalinger, hvilket resulterer i dårligere træning og konkurrencer.
- Længden pr. omgang er ikke så væsentlig. Den vil herefter være ca. 90-95m.
- Andre forslag bedes sendes til Sutton på email: sootythirtythree@hotmail.com

- **Useful Info**