USA Hockey Recertification Program

Developing Quick Feet and Hands Through Overspeed Training

Lesson Workbook

Presenter: Jack Blatherwick
Exercise Physiologist
John Harrington
St. John University
Overspeed Skill Practice:
The Raising Comfort Zone

Introduction

How should young hockey players prepare for the next level up? How should a team train to make the next step? How does the U.S. Olympic team prepare for competition with Russia?

The following analogy demonstrates the similarity in all three questions. Consider two teams:

a) Russia
b) the rest of us.

Russians practice all skills at uncomfortably fast tempo and maintain this pace for hours. In 1981, S.Y. Deryabin, of the Central Lenin Institute of Physical Culture, submitted to coaches that Russian youth should emphasize, “…speed, acceleration, and high speed turns, puck skills, and special (hockey-specific) endurance. In Russian hockey everything is constructed on sudden spurts and turns of speed.”

The rest of us practice at comfortable speeds. To work on our shot, we dump a bucket of pucks at the top of the circles and take slap shots with a slow, comfortable wind-up. Meanwhile, the Russians work on shooting while their feet are moving at full speed, never letting the goaltender know when the shot is coming. The rest of us set our feet and coast, because even in practice, we want to crank off impressive shots in front of our peers.

As a Russian forward approaches the defense, his feet are flying, his stick never stops moving in and out, his head and shoulders move side to side, and all of the sudden he’s past the defense, sprinting toward the goal. Passes are made and received while skating full speed around corners. The rest of us follow the North American tradition, practicing and playing at one speed and “kicking it up a notch” for play-offs.

Actually, the Russians are happy the rest of us get emotionally high for the Olympic Games, and try to compete faster than ever before. They know the opponent will not operate effectively in the “Russian Comfort Zone.” Added tension is created because of the unfamiliar pace of skills, and this leads to fatigue. The Russians have practiced and played in this zone – hour after hour, year after year. The rest of us have not.
Over-speed skill practice – raising our own comfort zone

If we consider the problem facing any youngster competing for the first time at a higher level, it is the same problem the rest of us face in competition with the Russians: attempting to play at a faster pace than the one established by hundreds of comfortable repetitions. In other words, we must begin practicing skills at an uncomfortably fast pace for many hours and many months in order to raise our own comfort zone.

Consider how often we move at comfortable speeds in practices, games, and in our everyday lives. It’s easy to see how permanently ingrained these slow speeds are in our makeup. Besides being a psychological phenomenon, the comfort zone is truly physiological as well. By definition, walking, jogging, and all aerobic training is done at a comfortable pace. If a jogger speeds up just a little, he experiences discomfort from lactic acid build-up in muscles and blood. As a result of the acidity, the jogger feels pain, loses strength, endurance, and coordination, and hyperventilates, because the pace is just slightly above the comfort zone set from many training sessions.

Increasing the speed at which we perform all skills in competition requires five phases of on-ice training. The order is important.

1.) Learn basic skills at a comfortable pace (not discussed in this book, but a good topic for another day).
2.) Overspeed skating without pucks: increase skating speed and acceleration beyond present limits, especially short bursts around corners. Avoid tightening up from your effort to reach new speeds. Relax, and attempt overspeeds in a comfortable, smooth, efficient way.
3.) Gradually add skills like carrying the puck, shooting, and passing into your overspeed skating.
4.) Incorporate spontaneity or creative decisions into the overspeed drills.
5.) Overspeed competition: this may require new types of scrimmage activities where the environment is controlled by the coach. Try 3-on-3 and 5-on-5 with no contact, very short shifts, and even with lighter equipment.

If at any time the pace of the skill practice slows down, return to the simplest, fastest skating drills without pucks. Sometimes, simple straight-ahead races are a vivid reminder of the pace at which we want to attempt all skills.

Off-ice preparation for overspeed skill practice: the essential building blocks.

The critical ingredient for on-ice, over-speed workouts is quality repetition. Without first forming a solid base of endurance, leg speed, and leg strength, the skating skill will be compromised at some point and repetitions will be done incorrectly, teaching slowness rather than quickness.
Overview: Skating

1. Players and coaches of US teams have seen that Europeans are extremely fast skaters, especially adept at cornering and performing skills at high speed.

It is no wonder Russian scientists communicate to their coaches the importance of testing and training for speed (on and off-ice) in comparison to all other physiological tests:

“Factor analysis, including tests of physical development showed the greatest factor loads go to tests describing speed capabilities...especially speed acceleration and high speed turns. This is particularly important since that component of fitness is most successfully open to development at a young age.” (Deryabin, USSR 1981)

2. Our research with over 2000 hockey players and 60 teams of various age and skill levels shows that teams at a higher designated level of play are faster at top speed and accelerate more quickly.

3. Attempting corners at over-speed requires greater knee bend, a fact which does not apply to over-speed skating in a straight line. Simple physics of cornering forces shows us that strength training must supplement on-ice learning in order to develop this skill correctly:

Cornering skill might be learned and performed perfectly at a slow speed, but while the technique does not change at high speeds, it becomes increasingly difficult to corner as we attempt faster speeds. The player must lower his center of gravity more using greater knee bend, and this must be done against extremely high centrifugal forces. Without strong legs, players will revert to some form of compensation which develops poor technique if repeated often.

These facts imply that we must start training at a very young age for a low center of gravity by bending our knees in off-ice drills as well as when we skate.
Overview: Overspeed Training

1. Our research with more than 2000 hockey players has shown that the ability to skate fast is highly related to off-ice sprinting and jumping.

2. This tells us that hockey players should train like track sprinters, hurdlers, or high jumpers. Whatever makes us faster sprinters or higher jumpers is likely to improve skating quickness and cornering ability.

3. Off-ice sprint training – quality sprints with plenty of rest – can help us become quicker skaters. This should include some uphill sprints for over-load, and some sprints down a slight hill (-5%) for overspeed. Sprint training is one of the best ways to improve skating speed at any age.

   We should not under-estimate the value of quality sprints. Just because there isn’t a lot of pain in the muscles (like after lifting weights) doesn’t mean there hasn’t been a lot of development. We are training the nervous system. Sprinting uses every attribute of athleticism and teaches the intricate neuromuscular patterns required to move our legs quickly, summing up forces in a very coordinated, consecutive manner from our trunk, down through hip extensors, to knee extensors, to the final pushoff from the ankle and foot extensors.

   To sprint fast, you must learn to increase power output while remaining relaxed. This is a valuable lesson for a hockey player trying to skate faster. Both movements utilize quickness and power, but are most efficiently done in a relaxed, coordinated, rhythmical, smooth manner.

   The recovery phase of running and skating is equally as important. An added benefit of doing sprints (especially uphill sprints) is to help avoid strains to the hip flexors that are so common when we first skate all-out in the fall. Relatively slow strength training, even in the correct range of motion may not prepare us as well as sprints for the explosive movements in skating that cause injuries.

   Young hockey players should consider sprinting on the track team. Track coaches know how to make you faster. We can learn a lot from their training methods.

4. Lower body strength training is essential for a powerful skating stride. We have previously discussed the need for strength training to corner properly against high centrifugal forces. This is almost an isometric or static strength. For skating quickness we need to develop power: the ability to combine strength with speed.

5. Plyometrics or jump training uses strength in an explosive way, improving power. These should be done on a soft surface and only following months of strength training, in order to reduce the chance of injury.

6. Overload plyometrics, such as one-legged or two-legged jumps with or without a weight vest can help us form correct habits of skating with greater knee bend. These should be modified to approximate the skating range of motion.
Overview: High Speed/High Tempo Workouts

1. The critical factor for on-ice, high speed skill workouts is quality repetition, and this is the responsibility of both the player and the coach.
   a. The player must attempt every drill at uncomfortably fast speeds.
   b. The coach must plan as systematically for rest and recovery as for workouts.
      Rest intervals are timed between overspeed drills. Recovery days are interspersed between intense workouts.

2. In order for a series of drills to improve quickness and skill:
   a. All out sprint intervals should last about 5-15 seconds. If there are no stops-and-starts or if, by design, the effort is less than maximal, the work intervals can be longer.

3. NEVER is an individual skating drill done for endurance, because once lactic acid builds up and fatigue sets in, skating skill and speed are compromised.

4. Endurance is gained in several ways without reducing the rest interval and quality of each skating drill:
   a. During a season there will be thousands of over-speed skating intervals, in which the work:rest ratio just barely allows for recovery.
   b. Gradually increase the length of a conditioning practice so that by mid-season it lasts as long as a game. All drills on that day (including team flow drills) are done with proper intervals, and all rests are planned and timed. On this day there are no lengthy explanations.
   c. Gradually increase the length of some of the work intervals and shorten (only slightly) some rest intervals as the season progresses.
   d. Include some longer skating intervals (like weight vest training) which are not done at high speed, but where the goal is to keep the knees bent, developing muscular endurance in this range of motion.
   e. Maintain these workouts, at least twice a week throughout the season.
   f. Endurance is built gradually within a year-long training plan, including off-season conditioning; there are no quick fixes in the conditioning process!

5. Learning skating skill is no different than learning other athletic skills. Repetitions must all be done with quality, and endurance is not a priority in these drills. Never train for skill, quickness or agility when you are tired.

6. Supercompensation (improvement) from intense workouts requires rest and adequate nutrition. Hard work will only lead to progressive weakness if recovery days are not as well planned in advance as work days. Training camp is not a period of the year for two-a-day conditioning workouts.
Overview: The Learning Environment

1. If our goal is to improve skills, we must create a perfect learning environment, focusing on the process, or journey more than short-term results, immediate wins.

2. The coach’s role is that of an educator, to:
   a. Instill confidence
   b. Have patience with mistakes
   c. Diminish the fear of failure
   d. Promote relaxation in the face of tense competition
   e. Remain positive and focused on improvement in every situation
   f. Make the experience fun and constructive
   g. Prepare the student to succeed without the teacher

3. As coaches, we sometimes act as if our role is to punish or berate players after mistakes, heightening the fear of failure, rather than diminishing it. Imagine a sixth grade teacher doing this when mistakes are made on a math assignment. We’re often impatient, sarcastic, and even abusive in handling mistakes. At these moments hockey no longer resembles either a game or an educational experience.

4. We must be infinitely more patient. At the beginning of the season it is tempting to win early games by using a system that minimizes the potential for errors: dumping the puck, attempting no creative plays, and using simplistic, illegal defensive systems. We must have patience with mistakes of commission, allowing players to try new skills and fail once in a while in the heat of the battle.

5. The right environment includes protection of skills by the rules. The only other ‘sport’ which discourages its original style of play as much as hockey is WWF ‘wrestling.’ We’ve bent the rules so much toward illegal defensive hockey that it has become nearly impossible for skillful players to excel. Interference is never called, having the same impact it would in football or basketball if interference were ignored. Coaches have taught players that good defense is ‘holding up their wing.’ How does this differ from holding a football wide receiver on the line of scrimmage, pre-empting his participation in the offense?

   Skillful hockey players are an endangered species. If basketball rules were ignored, wouldn’t the Michael Jordans and Magic Johnsons be replaced by a bunch of Hulk Hogans? Put a big, strong linebacker on a wide receiver like Jerry Rice and you’ll surely eliminate him from football if interference is not called.

   If we want skills in hockey, the environment must be protected by officials who interpret the rule book the way it is written. Then, the coaches’ efforts would necessarily be directed toward finding skillful players and practicing skillful hockey rather than the simplistic defenses that depend on cheating.

6. “Coaches must return the game to its youth,” warned Herb Brooks. It is fashionable for a coach to make a name for himself by demanding strict adherence to a static system of X’s and O’s, drawn on a blackboard. The effect is to eliminate creative plays and instantaneous decisions in a dynamic, read-and-react game.
Overview: Raising the Comfort Zone

1. To break old habits from years of practice at comfortable speed, we will use a combination of drills to improve foot speed, knee bend, and powerful strides.

Changing habits amounts to, “neuromuscular shock treatment.”

Intensity and quality repetitions are key factors in order to make positive changes.

   a. On-ice sprint intervals are done at top speed for only 5-12 seconds. Rest intervals allow nearly complete recovery (60-75 seconds).
   b. Skating corners, quick stops-and-starts, and short bursts following a change of direction are probably the most important and most difficult drills. But, incorporate enough straight ahead sprints to reinforce habits of quick feet.
   c. Underload workouts should be added to the training calendar. This is analogous to the tow training or downhill running done by track athletes. Wear lighter equipment, removing shoulder pads and breezers, so you feel faster and are psyched up to skate faster than ever. Longer rest periods can augment this effect.
   d. Emphasize powerful strides, quick feet, and good knee bend at the very end of each drill, when lactic acid would tempt you into slowing down or compensating with poor technique. Push yourself at the end of each sprint.
   e. Contrast skating drills begin with ‘perfect technique’ at a comfortable pace and gradually accelerate to top speed, by maintaining the same smooth technique, but with quicker feet. Visualize a perfect stride throughout the drill.
   f. Weight vests raise the center of gravity and increase the centrifugal force on corners. The goal: emphasize greater-than-normal knee bend around corners. Work:rest intervals should be from 15:60 seconds, up to 40:80 seconds at the very end of practice.

2. The players’ job is to attempt the highest possible speed...the coach’s job is to time the intervals, allowing enough rest so that quality is possible on every repetition.

3. In a sprint interval drill, if the puck becomes an anchor and slows the player’s speed, or if he loses the puck, he should continue through the drill without it.

4. Some very simple drills follow. Use your imagination to create new ones, but the drill should not be complicated enough to slow the pace.
Over-Speed Practice On-Ice

The goal for over-speed practices is to elevate the present comfort zone of skills.

This means that each player must venture into new territory – attempting to corner faster, shoot and handle the puck while skating at top speed, pass and receive in full stride, and make offensive plays at a quicker tempo. Every skill is attempted at an uncomfortably fast speed, so that in a few weeks, this speed will be the new comfort zone.

Have patience with mistakes!!

It is no problem to lose the puck or fall once in a while, when you’re trying to go faster. When shots are first attempted at top speed without coasting, they’ll be weaker. The only way to fail in over-speed drills is to not attempt faster speeds. Both players and coaches have to be patient with mistakes of commission – it’s not easy to perform skills at superfast speed.

There is a reluctance to be less than perfect in front of peers. No one wants to shoot a weak shot because it’s never been tried before with feet moving that fast. It’s more impressive to crank a slap shot with a comfortable time to wind up. This is precisely what is meant by practicing above your present comfort zone. It’s uncomfortable.

But it’s better to be uncomfortable here in practice than in the biggest game, where the pace will be the fastest possible.

The progression over a season:

The first step is to convince players to attempt cornering as fast as they would skate straight ahead if they were racing for a $10 bill. Straight ahead races are a good starting point, but also a vivid reminder when the pace of more skillful drills slows down a bit.

Next, skate corners at top speed while carrying a puck and shooting. Passing should be added, and later some spontaneous decisions and creativity, such as getting open for a pass without a route designated by the instructor. The final step is high speed scrimmage and competitive drills.

The progression in a single practice is usually just the opposite.

The most skillful, creative drills and high speed flow drills are done first while the ice is good and players are not tired. This is usually followed by simpler skills like carrying the puck and shooting. When the ice is not good enough for stick skills, work on skating quickness and cornering. Finally, the last 10-20 minutes us the weight vests, not trying to move the feet quickly, but keeping the knees bent and chest up.

Quality repetitions to raise the comfort zone!!

Intervals must be timed in order to allow enough rest. If you’re doing a total of only 15 minutes of intervals, start a new sprint every minute. If the workout is longer, start a new sprint every 75 seconds.
Overview: Introducing competitive drills

1. High speed practice competition is the final stage in the step-by-step elevation of our comfort zone. The progression:
   a. Skating straight ahead at over-speed; learning skills at slow speed
   b. Skating corners without pucks at over-speed
   c. Handling the puck and shooting while moving at top speed
   d. Passing and receiving passes during over-speed skating
   e. Adding creative decisions to the over-speed drills
   f. Practice competition at over-speed

2. Timing the shifts (and rest periods) in scrimmages or competitive drills is just as important as during sprint interval training. A scrimmage shift should last no longer than 40-60 seconds, and the rest should be 2-3 times as long. Additional rests are necessary if the scrimmage lasts more than 30 minutes.

3. The first over-speed scrimmages need to have no-checking and fewer players on the ice, so there is time and space to make plays at a faster competition speed. When more players are added or competition drills are devised for tight areas, coaches have to encourage players constantly to keep the pace fast.

4. As coaches, we should not be intimidated into thinking the scrimmages are not valid practice drills – in fact, it is impossible to find a better drill. The only time a scrimmage would be inappropriate is when players are doing many things wrong. Dave Peterson (twice Olympic coach) and Bob Johnson (Olympic coach and Stanley Cup Champion) said, “If you could do only one drill, it would be a scrimmage.” Anatoli Tarasov, longtime coach and father of Soviet hockey, felt the best practice is, “…high tempo scrimmage.” Herb Brooks felt, “Unstructured scrimmages (3-on-3, 4-on-4, 5-on-5) are where we develop the brilliant, creative players, the Wayne Gretzkys, Neal Broten, and Mark Pavelichs.”

Years ago, a hockey coach was busy shoveling snow and flooding the rink, so very often he just tossed out a puck and let the kids scrimmage, and the great players of today developed in that environment. “A funny thing happens in a scrimmage,” commented Ben Smith, U.S. Womens National & Olympic Coach. “There’s a lot of hockey going on. It’d be hard to find a drill that creates these game-like situations.”
5. Some competitive drills and scrimmages are summarized briefly below.

Competitive Scrimmage Drills

**3-4-5 Players**
- 3-on-3, 4-on-4, 5-on-5, timed shifts (40 seconds); change on whistle

**Overspeed**
- Maintain highest possible speed: no-checking, light equipment, 40 second shifts; emphasize moving at top speed without the puck.

**One-Touch**
- Think one play ahead, look at options before receiving; think like puck carrier, get open, talk to each other; full-ice, half ice against cut-off sticks.

**Cut-off Sticks**
- Full ice, one team working on forecheck, neutral zone check, D-zone; coach throws pucks in any zone to change pace, regroup.

**Cross Ice**
- 2-on-2, 3-on-3, 4-on-4, 5-on-5 in tight areas.

**Either Goal**
- Same as above, but allow either team to shoot at either goal.

**Half Ice**
- 3-on-3, extra players are point men; to change from defense to offense, pass to point.

**Half Ice**
- Defensive zone coverage, 3-on-3, 4-on-4, 5-on-5, 5-on-6, 5-on-7, with or w/o cut-off sticks; play D when slightly tired (rotate from offense for 40 seconds to defense); use scoreboard to simulate last 40 seconds of the game.

**Power Play**
- Full ice, half ice against cut-off sticks

**Behind Goal Line**
- Offensive zone play: 1-on-1 controlling the puck; 2-on-2 or 3-on-2 cycling, picking, and controlling the puck behind the net; another option: play against defensive players with cut-off sticks.

**Behind Goal Line**
- Defensive zone play with puck: same as above for defensemen and centermen: reversing, controlling the puck along the boards, etc.
Olympic teams as a role model for development

Prior to the introduction of pros in 1998, the United States, Russian and Canadian Olympic Teams offered a role model for development that should be considered at every level:

The end goal is never compromised for short-term success.

1. North American Olympic Teams have the necessary challenge: you’ve got one season to prepare to beat the Europeans at their own game.

2. Conditioning isn’t sacrificed to the game schedule. Skill development and other long-range objectives take precedence over immediate wins.

3. The Olympic Games are officiated in a way that discriminates against the hook-and-interfere systems of college and professional hockey. Skill development is a top priority, both in practices and games. It is not a viable game plan to dump the puck to the opponent, sit back, grab your wing, and play defense. If you can catch them to interfere, you’ll be penalized, and they’ll beat you on the power play.

You must control the puck to compete against talented Olympic opponents: regrouping in the neutral zone, cycling deep in the offensive zone, and breaking out with a mixture of long and short passes. In this style, teams do not dump the puck to the opponent, but use indirect passes when everyone is covered.

4. The entire season is a ‘training schedule.’ Wins and losses are far less important than development. This creates a relaxed, learning atmosphere, tolerant of individual weaknesses – much like a classroom where students are not put down for making a mistake.

5. The model works! Both the Canadian and U.S. Olympic Teams have a record of tremendous improvement over the course of a six-month developmental season. We’ve tested and watched closely as these teams improve faster than any other level in hockey. Coaches like Herb Brooks, Murray Williamson, Bob Johnson, Lou Vairo, Dave Peterson, and Dave King are geniuses at promoting development, each in his own unique way. Witness the skillful style evolve, and you might ask the question: ...why don’t all teams improve at this rate?

Russian youth programs operate under similar guidelines, and obviously their end product speaks well for this philosophy. No one would think their superior skills can be attributed to genetics. They have a well-defined development program.
To improve skills we must create a perfect learning environment.

**First**, it is implied that the team practices. Most youth organizations schedule far too many games, in which only the very best players have the puck long enough to improve skills. An average bantam forward may play 1/3 of the game, 10-12 minutes of ice time, during which he might skate at top speed for a total of 20 seconds and handle the puck for 12 seconds. How can skills be developed this way?

**Russian youth teams practice 6 hours on the ice for every hour of competition.**

**Secondly**, during practice, failure must be re-defined as a failure of omission not one of commission. The only way to fail in an overspeed skill workout is to not attempt new skills and new speeds. Attempting skills at uncomfortable speeds will almost certainly result in weaker shots, missed passes, and occasionally falling during an overspeed cornering drill. The coach and team must accept these weaknesses with nothing but encouragement. We must be patient and supportive.

“The team that makes the most mistakes wins in the end.”

During games we must have the patience and foresight to define failure in the same way as in practice: failure to try new skills, new speeds, and new plays. It is interesting to compare the advice of John Wooden, one of the greatest coaches of all time, to recent popular opinion. Wooden asks, “How can a real teacher not indulge mistakes?” He lived by the philosophy of his own college coach, “The team that makes the most mistakes wins, for good things come to those who risk error by taking the initiative.” By taking the initiative to try new skills, this team will be better in the end.

Wooden won 10 NCAA basketball championships in 12 years! Logic would argue that coaches might follow his lead. It’s a shame that logic is less significant in shaping our learning environment than the coach’s impatience and need to vent his frustration.

**Russian youth coaches lose their jobs if they prioritize winning over skill development.**

For development to take place, players must feel free to make mistakes. Hockey especially, is a game of mistakes. Our attitude should be that we will overcome them. By the end of the season, we well be a much better team if we try new skills at new speeds throughout the game schedule. The fear of failure in games can most certainly ruin every effort in practice to raise our comfort zone of skill performance.

Worrying about mistakes before or after the fact is a sure way to paralyze ourselves in games. Many of us are old enough to remember Franz Klammer skiing to a gold medal in the giant slalom during the 1976 Winter Olympics. This individual effort epitomized the attitude of ‘letting it all hang out’, competing on the brink of disaster to cut a few hundreds of a second. In order to utilize his abilities, every athlete must feel free to try his thing, unconcerned about potential disaster.

I remember watching from my 3-step ladder as Jack Nicklaus teed it up on the 18th hole at Pebble Beach to win the US Open in 1972. My friend asked, “Do you think he is aware the Pacific Ocean’s on the left and out-of-bounds on the right?”
No way; not at that moment. If ever there was an athlete who had the ability to shut everything out of his mind but the target, it is Jack Nicklaus. Television doesn’t do justice to Jack’s concentration. TV may capture his swing, but it doesn’t show how Nicklaus can be walking the fairway joking with spectators one minute, and switch out the entire world in the next minute before he hits a shot.

Imagine Jack Nicklaus’ caddy reminding him of the negative possibilities.

Would a caddy consider stopping Jack just before he tees off and warning him about the water on the left and out-of-bounds on the right? Is it likely the caddy would ever remind him of previous mistakes? Of course not. The caddy knows his role is to support the athlete – contribute to his confidence and help him focus.

How can a hockey coach see his role any differently? Psychologists tell us that constant reminders about mistakes will breed more mistakes by reinforcing negative thoughts. Coaches in team sports carry this one step further when we yell at kids and put them down for mistakes. I’ve watched a lot of golf tournaments and have yet to see a caddy yell at his golfer for a mistake.

The power of suggestion.

An excelling Minnesota golfer had it going one day, playing well in a qualifying round for a national tournament. Standing on the 16th tee, facing 200 yards of water before the fairway, he describes his mental approach as perfect, “I was totally focused and confident.” Just as he addressed the ball, one of the tournament scorers blurted out, “Remember, if you go in the water it is a direct, not a lateral hazard.” The golfer stepped away from the ball, agonized for a few seconds, hit the ball in the water twice before finishing the hole, and, of course, missed the cut.

Negative coaching can be simply mentioning mistakes or potential problems too often.

Coaches want to be helpful, and it is tempting to correct every weakness we see. However, constant reminder of past or future problems will just as surely initiate a negative self-image as yelling at players, using sarcasm, or public embarrassment. “Know the psychological makeup of your athletes,” said Herb Brooks. “Pick your spots. In the heat of battle, it is usually counterproductive to address mistakes. Wait until emotions are not as high, until another time when the adrenalin is not flowing.”

Correcting mistakes is part of teaching, and it is important to address some weaknesses with a positive role model instead. Imagine one of our students comes home with a report card that looks like this: (A,A,A,F,A,A). Do we see the F, and do we always mention it. Maybe once in a while we should ignore it, because the kid really wants to be recognized for what he did well. In all cases, the environment must be geared toward building confidence, and some time it is not worth winning a battle and losing the war.

Subjectively and based on their records, the two teams remaining at the end of the 1991 NHL season made more improvement than any in history. It is not coincidence that any player who has ever played for either of these two coaches characterizes him with words like, “Patient, optimistic when things were going bad, calm under conditions of stress, and positive...always positive.”

Overcoaching: taking the game from the players

Overcoaching probably comes from a frustrated need to still be on the field of competition. Herb Brooks saw this trend as, “...coaches justifying their existence.” Years ago, football coaches allowed quarterbacks to call the plays. Modern technology allows for radio information from the press box and an excuse for the coach to get back into the chess match. Fran Tarkenton points out how we have lost the leadership potential of the quarterback in this process. Furthermore, the spontaneity and personality of the players has been stripped from the game, replaced by computerized logic and close-up TV shots of coaches with headphones. We have also lost a great learning experience for a high school athlete – a chance to work all week on developing a game plan with the multitude of reactions to new situations.

This overcoaching syndrome has crept into hockey. The ‘in thing’ for hockey coaches is to look important by expounding on systems of X’s and O’s. Valuable practice time is wasted while players sit watching a chalkboard – something that certainly could be done off ice. We see too much of the coach in the media explaining how a change in strategy won the last game. It’s almost as if we’re looking for robot hockey players – ‘electronic puppets’ under our complete control.

This movement has become so trendy in the college and professional ranks that youth coaches can be intimidated into thinking that creative players are undisciplined. We demonstrate our abilities with rigid systems of play, the more complicated, restrictive, and defensive minded the better. From 30 rows up, practices look more like stationary black boards than active, fast moving playgrounds.

Certainly most of the great players we know came from backgrounds where the coach allowed them to do their thing. Next time you think about Wayne Gretzky ask the question: what would a college or youth coach do if he had a youngster who tried to play like Gretzky? Would that player be given the freedom to create? Would he be allowed to make plays at the offensive blue line, or would his skill be hidden by the demand to ‘dump it in deep?’ Does a potential young Gretzky have to chip the puck out of the defensive zone whenever he touches it? Is he required to ‘finish his check’ when the real Gretzky would already be anticipating and moving toward the next play? Does he have to prove to his macho coach he is “tough” by looking for body contact instead of avoiding it, like the Great One he watched on TV?
How many coaches allow a player to hang out deep in the offensive zone when the opponent is breaking out at the midboard? Gretzky often hid behind the net to see if his linemates could successfully forecheck the puck loose. After all, the original purpose of a forecheck was to get the puck back in order to make a play. It has become little more than fulfillment of a job outlined in depth on a blackboard. Do we allow a young kid to fly into the neutral zone on the breakout, looking for along breakaway pass? In an entire college season we might see only two long breakaway passes, because the coaches demand that everyone is back deep coming together. We are basically telling young players to stop thinking, “I’ll do the thinking for you.”

Mario Lemieux got several breakaway chances in the finals of the Stanley Cup when everyone in the building was watching him. The Czechs get ten breakaways against a team that prepared for this very thing. Some happen by design. Some happen because the player is brilliant, and has been allowed to play with creativity. I often wonder if Wayne Gretzky’s greatest asset was that he wasn’t listening to the modern day system-oriented coach, who would like everyone to play like a robot.

Why would any coach be so presumptuous as to demand that he do all the thinking? One of the greatest quarterbacks of all time, Fran Tarkenton, used to draw plays on the ground during a huddle – and then throw the winning touchdown pass after the computer-aided press-box information had taken the offense as far as it could. In a game as structured as football, spontaneous decisions by the athletes are still winning games. In a reaction game like hockey, athletes must be encouraged to create solutions.

Who are these games for?

Herb Brooks would respond, “We must return the game to our youth! By trying to fit every player into the same mold, we suppress the creative energy of our best players. For example, some defensemen are better suited and happier being steady, defensive players. Others have talents that are best expressed in the manner of a Bobby Orr or a Ray Borque. We lose a player when we don’t use him for what he does best.”

Anatoli Tarasov, the long-time Soviet National coach, was asked what he would consider the greatest failure by his players on a given day. Failure to win? Not hustling? Not backchecking? Not scoring? Actually, he didn’t mention any of these. He felt the biggest mistake they could make would be to play without creativity.

“The art of creativity means that you sometimes surprise yourself.” – Michael Jordan

“Most of the time I don’t’ even know what I’m doing on the (basketball) court; it just happens. There is no plan. I just read and react.”

Shouldn’t hockey be a game of reading and reacting? Some coaches attempt to define precisely what every ‘reaction’ should be to the infinite number of possibilities that come up in a hockey game. We want players to be puppets, because we like to be in control of the strings.

In an attempt to contribute, coaches might over-intellectualize skills. In golf, many players try to think their way through the swing after reading a technical description. Gary Player calls these failures, “Paralysis by analysis.” Actually, any physiological movement is best performed when it becomes a reflex movement. It follows that our goal in teaching a skill should be to eventually get the skill as far from the cerebral cortex (conscious mind) as possible.
In competition and in performance of skills, hockey is not a Captain-may-I game. Within the extremely rapid and complicated computer of our nervous system, when we must read and react in an instant to a constantly changing game, we should not complicate the decision with thoughts of being second guessed by the coach. The veteran defenseman of the Chicago Blackhawks, Doug Wilson, made an interesting analogy, “If a concert pianist has to think of every key he is going to hit, he’s in trouble. Same in hockey. When you start thinking instead of reacting, then you’ve got problems.”

Dave Peterson, coach of the 1988 and 1992 US Olympic Teams, encouraged his players to come up with their own answers using questions like, “Where can you get open? How can you create time and space?” He and Bud Grant, the long-time great coach of the Minnesota Vikings think of coaching as creating an environment for players to grow and learn, rather than trying to steal the experience for themselves.

The goal of any educator is to help students grow to the point where they no longer need the teacher.

Finally, Anders Hedberg, former New York Ranger and Swedish Olympian, writes about training, “If it isn’t fun, it isn’t sport.”

**Motivation toward training must rely much less on threat and much more on fun.**

We adults must evaluate our approach to see if we are motivating or threatening. For example, sometimes we threaten that a poor effort or dumb mistakes will be punished with skating drills or push-ups or extra running. What have we said about the fun of skating drills or other training?

Threats, intimidation, and fear are not synonymous with ‘discipline’ or ‘motivation.’

At levels of hockey that are called ‘big-time,’ college and professional coaches are threatened by the need to win games and save jobs. For players, there is the constant threat that careers and scholarships hinge on performance. In this setting, motivation often switches from intrinsic values in the game, to a fear of failure.

At one time, ‘the fun of hockey’ might have been defined with words like ‘sticks, pucks, beautiful skating, great moves, awesome plays, crisp passes, shots and goals.’ These were intrinsic qualities that motivated players to get better, because it is fun to excel. It is fun to improve. In ‘big-time hockey,’ a player might be fined or lose a scholarship for not lifting weights, not improving his game, not studying for class.

When creativity and playmaking are replaced by dump-and-lock-up-your-man strategies, it becomes less fun. There is little doubt that if given the choice, players would opt for a game like the simple pick-up games on the outdoor pond. It is the adults who have decided that hockey should not be that way for kids – even though it was for us.

In order to win with less skill, ‘big-time’ coaches lobby to have the rules ignored, allowing for a game plan dependent on hooking, holding, and interference. By eliminating skill and speed, the game is less fun to play and the participants are less motivated to improve.
It's fun to improve!!!

Every athlete is motivated by seeing results from his efforts. After weeks in the weight room doing squats, after running miles of hills, and after hundreds of skating intervals, a player is going to see improvement. At that point he is sold on the importance of his own work ethic. Being proud of your accomplishments is fun!

It is no different in the classroom. As teachers and coaches, we often use extrinsic motivators like college scholarships, grade point averages, graduation rates, and the threat of losing eligibility. All of these are important, of course, and each one is correctly identified as a reason to work hard. But, we sometimes forget the greatest motivation is intrinsic: it is fun to learn! There might well be information in a class that is truly exciting, if we study hard enough to dig it out. In the same way, it is really fun to work for months and watch your shot improve, to skate corners faster, to handle the puck at a faster pace. It's fun to dominate a game (this is what I'm told, and it is certainly borne out in my dreams).

Furthermore, as with a hard training effort, after spending long nights working on a term paper, even before it is graded, there is a great sense of satisfaction looking at the accomplishment. We should never forget that these intrinsic values are self-motivating.

Even without the additional reward of good grades, without the glitter of a pee-wee season featuring 75 games, without tournaments in another country, without the all-star team patches on your jacket, without the championship trophy, without a pro contract or a college scholarship...self-improvement is fun.

The greatest motivation to an athlete is the enjoyment that comes form working countless hours and improving those skills intrinsic to his sport. This is the journey toward excellence that John Wooden feels is more exciting than the end result. This from a coach whose end result was 10 National Championships!!!

The two most important decisions in planning the season are deciding what objectives to teach and how much time you should spend teaching them.

You will spend less time in planning your season if you use the approach suggested here than if the task is done practice-by-practice throughout the season. The recommended process will also help you verify which skills you believe are most important as you run out of available practice time and are forced to either omit objectives from your plan or find ways to achieve them outside of the normal practice time.

In addition to the good feeling and confidence that comes with completing a season calendar, you will have developed the base necessary to systematically change your plans as unexpected events develop. More importantly, you will know before the mid to late portions of the season whether or not your initial practices allocated too much time to some of the early season objectives. Planning ahead will help you avoid the mistake of devoting too much time to some objectives in the early season and then not have sufficient time for equally important objectives later on. A completed plan that has been implemented and reined is also an invaluable resource for next year's coaching assignment or for new coaches coming into the program.
Notes:
**Overspeed Give and Go**

**Objective**
- Have players elevate their comfort zone to execute skills at a high tempo

**Key Elements**
- Skating Speed
- Passing/Receiving
- Shooting Quick Release
- Hockey Endurance
- Creative decision making at high speeds

**Variation**
- This drill should be done in both directions.

**Goalie**
- Follow player thru center ice, Angle awareness.

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Divide the players into two equal groups positioned at the faceoff circle with pucks, at the red line, facing in opposite directions. Coach positioned at the lower area of the faceoff circle. On the whistle the first two players in line skating with the puck out to the boards, down to the faceoff circle in the end zone, making a tight turn, coming out of the turn, pass the puck to the coach and continue skating to the far side of the rink near the red line to receive the pass back from the coach to finish with a quick shot on goal. Receiving passes on the backhand is a difficult skill that needs to be practiced over and over for many years. Encourage quick release getting the shot on net.
Drills

**Mirror 1 on 1**

The forwards are positioned at the boards on the goal line. The defenseman at the same side of the rink are positioned at the hash marks on the faceoff circle. One forward and one defenseman start at the same time. The forward skates forward the whole time while the defenseman starts out backward and is mirroring the forward pivoting backward to forward and forward to backward as the forward skates to the near blue line turning and skating back to the goal line turning and skating down the boards to the other end. This is a competitive drill where the defenseman attempts to mirror the forward, staying as close as possible keeping good body position with the forward.

**Objective**
- Have players elevate their comfort zone to execute skills at a high tempo

**Key Elements**
- Skating agility foot work
- Pivoting Forward to backward
- Pivoting Backward to forward
- Accelerating out of a turn
- Body position

**Variation**
- Change sides of the rink.

**Goalie**
- Game like situation, play the 1 on 1 situation, Fight through screen, Rebound control
Drills

Mirror Lateral Mobility 1 on 1

The forwards are positioned at the boards on the goal line. The defensemen at the same side of the rink are positioned at the hash marks on the faceoff circle. One forward and one defensemen start at the same time. The forward skates forward the whole time while the defensemen is mirroring the forward pivoting forward to backward and backward to forward as the forward skates around the faceoff dot over to and around the opposite faceoff circle ending up skating all the way down the far boards to the other end. This is a competitive drill where the defensemen attempts to mirror the forward, staying as close as possible keeping good body position with the forward.

Key Elements
• Skating agility foot work
• Pivoting forward to backward
• Pivoting backward to forward
• Acceleration out of a turn
• Body position

Goalie
• Game like situation, play the 1 on 1 situation, Fight through screen, Rebound control

Objective
• Have players elevate their comfort zone to execute skills at a high tempo
Drills

Overspeed Change of Direction Support your Pass

Divide the players into two equal groups in opposite diagonal ends at the hash marks with pucks. The two coaches are positioned at the red line at center ice. The first player in each line starts with a puck and skates around the top of the circle over to the far side of the rink around that faceoff circle after skating out of the circle the player passes the puck to the coach at the red line and receives the puck back skating in, taking a quick shot on goal and finishing in the opposite corner. Receiving passes on the backhand is a difficult skill that needs to be practiced over and over for many years. Encourage quick release, getting the shot on net.

Key Elements
- Skating speed
- Passing/Receiving
- Quick change of direction
- Hockey endurance
- Creative decision making at high speeds

Goalie
- Follow the player from center ice. Angle awareness

Objective
- Have players elevate their comfort zone to execute skills at a high tempo
Drills

Overspeed Forward Skating

Line a group of players at the blueline. Three players start all at the same time following one another skating forward out toward the opposite diagonal blueline turning/cornering and skating forward to the opposite side of the rink turning/cornering skating forward through the neutral zone diagonally to the opposite blueline. Continue doing the same thing ending the drill at the opposite diagonal blueline that you started from.

Key Elements
• Skating speed
• Quickness
• Puckhandling while turning
• Hockey endurance
• Quick changes of direction

Variations
• Can do this drill with or with out pucks.

Goalie
• Have the goalies do movement drills, skating drills or handling pucks.

Objective
• Have players elevate their comfort zone to execute skills at a high tempo
Drills

Mirror Gap Control 1 on 1

The forwards are positioned at the boards on the blueline. The defensemen at the same side of the rink are positioned at the redline. One forward and one defenseman start at the same time. The forward skates forward the whole time while the defenseman mirrors the forward pivoting forward to backward and backward to forward as the forward skates down to the top of the circle back up to the redline down to the blueline and all the way down to the other end. This is a competitive drill where the defenseman attempts to mirror the forward, staying as close as possible.

Key Elements
- Skating agility foot work
- Pivoting forward to backward
- Pivoting backward to forward
- Hockey endurance
- Quick changes of direction

Variation
- Can include pucks with this drill

Goalie
- Game like situation, play the 1 on 1 situation, Fight through screen, Rebound control
Drills

Overspeed 2 on 0

Objective
- Have players elevate their comfort zone to execute skills at a high tempo

Key Elements
- Skating speed with the puck
- Passing/Receiving
- Shooting quick release
- Hockey endurance
- Creative decision making at high speeds

Goalie
- Make save and clear the puck quick, game like situation, must be focused on puck carrier, yet be prepared with a response to a quick pass to open man. rebound control. Adjust for a couple of quick follow up shots.

Divide the players into two equal groups and position them at opposite diagonal bluelines. On the whistle the first player in each line skates directly across the ice to receive a pass from the next player in line. The second player skates to the far side to support and receive a pass back. These two players exchange the puck up the far side of the ice regrouping back 2 on 0 down the opposite side of the rink for a quick shot on goal at the same end they started from. Both player will receive a pass from the coach in the corner for two follow up shots. There will be bad passes and missed passes in this drill the second shots should not always be comfortable. Encourage quick release and get the shot off no matter how difficult the pass.
Drills

Overspeed Pivots Forward to Backward/Backward to Forward

Line a group of players at the blueline. Three players start all at the same time following one another skating forward out toward the opposite diagonal blueline pivoting backward and skating backward to the opposite side of the rink pivoting forward and skating through the neutral zone diagonally to the opposite blueline. Continue doing the same thing ending the drill at the opposite diagonal blueline that you started from.

Key Elements
- Skating Agility
- Pivoting forward to backward
- Pivoting backward to forward
- Accelerating out of a turn
- Hockey endurance

Goalie
- Have the goalies do movement drills, skating drills or handling pucks.

Objective
- Have players elevate their comfort zone to execute skills at a high tempo

Overspeed Lateral Skating

Divide the players into four equal groups positioned at the bluelines along the boards. Opposite diagonal players go at the same time two players from each line. Skating out to the far blueline using quick changes of direction back to the redline back to the blueline to the far blueline and continue this in the neutral zone with alot of direction changes finishing up at the other side of the ice after going around the neutral zone 1 1/2 times.

Key Elements
- Skating speed forward and backward
- Lateral skating mobility
- Quick change of direction
- Hockey endurance

Variations
- Can be done both forward and backward.

Goalie
- Have the goalies do movement drills, skating drills or handling pucks.

Objective
- Have players elevate their comfort zone to execute skills at a high tempo
Drills

Overspeed Figure 8

Line a group of players at the goal line at one end of the rink. Two or three players start all at the same time following one another skating forward around the face off circles using crossunders in order to accelerate thru the turns.

Key Elements
- Skating agility foot work
- Puckhandling
- Puckhandling while turning
- Hockey endurance
- Quick changes of direction

Variations
- This drill can be done in the neutral zone around the face off dots.

Goalie
- Have the goalies do movement drills, skating drills or handling pucks.

Objective
- Have players elevate their comfort zone to execute skills at a high tempo while handling the puck

Overspeed Crossovers

Line a group of players at the blueline. Three players start all at the same time following one another skating forward out toward the opposite blueline skating a large circle back to the other blueline making a complete circle and a 1/2 around the center ice faceoff circle ending up at the same blueline on the other side of the rink.

Key Elements
- Skating speed
- Cornering at high speed
- Quickness
- Effort with maximum intensity

Variations
- This drill can be started with two groups at opposite diagonal blue lines if you have more players on the ice to get the proper work to rest intervals

Goalie
- Have the goalies do movement drills, skating drills or handling pucks.

Objective
- Have players elevate their comfort zone to execute skills at a high tempo
Drills

Overspeed Transition Skating

Line a group of players at the goal line at one end of the rink. Three players start all at the same time following one another skating forward out toward the blue line pivoting backward always facing the direction that they came from. Pivoting backward to forward in front of the goal crease accelerating out to the neutral zone again pivoting backward down to the opposite corner of the end you started in.

Key Elements
- Skating Agility
- Improved Speed
- Quickness
- Pivoting
- Conditioning/Endurance

Goalie
- Have the goalies do movement drills, skating drills or handling pucks.

Butterfly Skating Warm Up

Two large oval circles, created between the goal lines, skating through the middle of the ice. 1. From blueline to blueline increase the speed 2. Backwards between the bluelines 3. 360 degree spins at the bluelines 4. Quick crossover, both left and right strides in neutral zones

Key Elements
- Skating
- Edge control
- Overspeed
- Crossovers

Variations
- Stick handle through obstacles through the middle.
- Drop to knees at lines.

Goalie
- Can skate with all players.

Objective
- Have players elevate their comfort zone to execute skills at a high tempo

Objectives
- Warm Up Skating Agility
Drills

Czech Skating

Four equally divided lines of players all at one end of the ice behind the goal line. On the whistle the first player in each line starts and skates to the neutral zone area. Lines one and three execute their circles before the red line, and lines two and four do so after. Maintaining good balance and edge control while maintaining their speed through the turn and accelerating out of the turn all the way to the tops of the circle at the other end.

Key Elements
- Skating
- Edge Control
- Circle with speed, both ways
- Acceleration out of a turn
- Can be used as conditioning drill

Variations
- Add pucks, or perform backwards, or stagger players and turn it into a shooting drill for the goalie, can also be used as a race

Goalie
- Participate with the players working on skating.

Objective
- Edge control drill maintain speed around circle

Russian Circles

Players divided in two lines, one in each corner. First player in each line goes at the same time around face off circles as shown, as they swing down an pass the other line the next players can go. Each player skates a half circle around each face off circle on the ice ending up at the other end.

Key Elements
- Crossovers both directions
- Heads up
- Puckhandling while turning
- Skating balance and agility

Goalie
- Participate in the drill, skate with all the players.

Objective
- Crossover skating both ways
Drills

Top Speed-Pivot Turns

Form 3 lines at the goal line. Players start skating forward and skate to the red line, they pivot backwards and skate towards the blueline using crossunders-step out forward at the blueline and accelerate using crossunders to the far blueline.

Key Elements
• Crossunders
• Keep feet moving
• Backward pivot turn
• Backward-Forward step out

Variations
• Can start out backwards to forward and With or without pucks.

Goalie
• Participate in drill

Objective
• Acceleration

Sprint Intervals-Loop

Form 3 lines at the goal line. Set-up cones inside each blueline per diagram. Players skate at full speed to the center red line and skate a large circle in a clockwise direction at top speed-no gliding-always keeping their feet moving- and sprint to the far end of the rink.

Key Elements
• Full speed
• Crossunders on turn
• Keep feet moving
• Skate outside your comfort zone

Variations
• With pucks

Goalie
• Working on skating skills

Objective
• Overspeed Skating Drill
Drills

Transition Skating

LPlace cones or gloves as indicated in the diagram - staggered. Players skate forward to the first pylon / glove and pivot backwards - skating backwards to the next pylon / glove and pivoting forward to the finish. Do drill in both directions.

Key Elements
• Proper knee bend
• Balance through turn
• Push through to full extension
• Use Crossunders

Variations
• Use step out pivot turn
• Add pucks

Goalie
• Working on skating skills

Objective
• Pivot Turns

Full Peanut Skating

Set up cones as indicated in diagram (shape of peanut). Players skate around cones using crossunders and accelerating through turns.

Key Elements
• Keep feet moving
• Crossunders pushing through / under
• Push through to full extension

Variations
Add:
• Pivot turns
• Forward and Backwards Skating
• Pucks
• Use a "half" peanut

Goalie
• Working on skating skills

Objective
• Skating agility and quickness
Drills

Figure 8 - Skating

Players skate around face-off circles using crossunders in order to accelerate through the turns.

Key Elements
- Keep feet moving
- Crossunders pushing through / under
- Push through to full extension

Variations
- Use cones in tight circles.
- Use gloves in tight circles - Can use a control / tight turn and accelerate out of circle using a crossunder.
- Add Pucks

Goalie
- Work on skating skills.

Objective
Crossunder skating
On Ice Presentations
On Ice Presentations
On Ice Presentations