## **Developing Game Intelligence in Ice Hockey**

Each epoch is characterised by certain tendencies or fashions. This applies also to ice hockey. While teaching and coaching ice hockey was orientated in the early 50' and 60's mainly on improving technical skills, the following decade focused mainly on the physical preparation of hockey players, an aspect which up to then had been underestimated. The World Cups in the 90's initiated then a tendency in which individual, group and team tactics were considered fundamental for achieving good result, especially against stronger teams. And now in the first decade of a new century where ice hockey is going to, which would become the next tendency in teaching and coaching ice hockey in the years to come? By sure there are different visions about it around the globe but it could be interest to know which of various tendencies will finally come out.

Today, to make sure frequent victories it's absolutely necessary to dispose of complete players, better developed than ever ,with an excellent technical ability, physically fitness level, a wide tactical knowledge and mentally well prepared. But is there still something to improve in their performance which has been left behind? Which aspects of the development of a complete ice hockey player has not been considered or stimulated sufficiently in training to bring hockey to a superior level?

There is one aspect of the player's performance which needs in future more attention within the learning and teaching process of any hockey player which soon may become a tendency all over: the development of the game intelligence in ice hockey, authentic motor of a player's performance and responsible for the quality of the game. Without doubts the grade of intelligence is already an important criteria for evaluate the performance level of each player. The development of intellectual capacities of youth and adult hockey players is still in its infancy, largely due to the authoritarian teaching style preferred by the vast majority of trainers and coaches when they shape and coach their players.

The frequent instructions and hints that the players receive before a game and during its development from the side-line are not sufficient to take to a higher level.

The only way to improve the standard of play in the medium and long term is to, among other aspects, start a systematic development of thinking and tactical awareness from a very early age with the emphasis on a progressive stimulation of their perceptive and intellectual capacities. As the player's skating and puck handling skills get better and better, he should also perfect his knowledge and thinking, not only developing his muscles and tendons but also his brain.

It is well known that practicing, experimenting and observing gives any child a wide variety of different experiences. Going one step further by using and interpreting these experiences leads to a correct behaviour pattern when faced with different situations both in life and in ice hockey. But if nobody guides the child and helps the young hockey player to interpret his proper experiences, he will never reach his full potential, neither in live nor in ice hockey. What he needs is the experience of an adult, to offer advice, to question almost everything and to give examples. This is not only true for everything the child experiences for example in school or with the family, but also as far as the development of his overall performance is concerned.

As soon as possible, depending on the technical level of the player, all youngsters should be exposed during training to simplified games to gain first-hand knowledge and tactical experiences about the correct way to acquire tactical habits. The more knowledge the youngster acquires the better! But subjective experiences alone are not enough! The acquisition of experiences and knowledge is much better when it is a result of a well-proven pedagogical

"There is no mayor power on the ice-ring than the players' intelligence"

process where the coach, uses questions and demonstrations to unlock the development of experiences and knowledge, making them clearly understood. Stimulation, encouragement or advice, an explanation or demonstration by the coach, together with the appropriate number of repetitions of the same game situation and subsequently the transfer of the solution to it to other similar situations that occur in the game forms a solid foundation in the young ice hockey player's mind for developing his game intelligence.

Intelligence must be developed mainly the global and not with the analytic method, exposing the pupils to series of technical-tactical simplified games such as 3 v 1, 2 v 1 or 3 v 2. Dependant on the contents of a simplified game each player has to face and resolve a series of problems which should be shaped perfectly to his interests, his physical, technical and mental capacities! A great variety of series of different progressive exercises and games are proposed in this book with which help to develop step by step the youngster's tactical thinking and awareness until he has discovered himself ,with the coach as a guide, a great variety of solutions for almost every given situation that he confronts in the ice hockey game. It doesn't matter if the solution was discovered thanks to the frequent repetition of a similar situation in training or due to a his imagination, creativity and spontaneity. The important thing is that the player has been able to understand and read the situation and then resolve the problem successfully.

The ability to quickly and efficiently vary a previously learned skill is only possible when the player has been exposed to a systematic development of his intellectual capacity from a very early age right through to top performance level.

Good perception, a vital requirement for any player, followed by a correct interpretation of the game situation and the ability to make good decisions finally culminates in a good technical execution of the mentally prepared move. All these phases of any playing action are prerequisites needed to be coached with details and interest from the coach's point of view over a period of years in order to be able to raise the performance level of any player.

## What does game intelligence mean?

Like most of the people, also ice hockey players are intelligent, but their grade of intelligence and type of intelligence is very different. Every position in the team or task to perform requires a specific type of intelligence. The one required of a goalkeeper is totally different to that of a l defender or a front-line attacker as the problems are not resolved in the same way neither in defense nor in attack or inside the ice-ring or only in front of the goal.

The intelligence of a player should be considered as the real driving force behind his performance. Often, the difference between one hockey player and another is the level of intelligence he demonstrates in the game. His intelligence explains his success.

A high level in hockey is only possible when making constantly use of the intelligence. Neither a player who is physically fit and technically proficient but without an alert mind or intelligence can be considered a complete player nor one who is capable of resolving problems mentally, but is unable to transfer his brilliant ideas into actions which benefit his team.

Unlocking and developing systematically an ice hockey player's game intelligence still is exceeding the knowledge of many coaches and teachers. Unfortunately there is no literature about developing this important aspect neither in ice hockey nor in other sports and few coaches are prepared to modify their coaching style (please consult the last chapter of the book "Stimulating game intelligence and understanding of ice hockey") which is an important prerequisite for being able to stimulate game intelligence. The continuous commands and

instructions given by most of the coaches before, during and after the match prevent most of the players to use their intelligence. Instead of confronting the players in training with a great variety of problems to be resolved, they receive day by day the solutions to the problems from the coach to which they have to obey. The coaches' rigid and authoritarian coaching style doesn't develop intelligent players with awareness and responsibility.

To get in future more intelligent players on the pitch, the coaches need to stimulate more and instruct less. Instead of being instructors in the ring, they should become consultants, guides or organizer of information, knowing how to complement the teaching of technical skills with the accumulation of game specific knowledge, thus achieving a significant learning!

Develop game intelligence in any ice hockey player implies teaching him...

\*to read the game and to understand what is going on on the ice (for which a certain level of perception, knowledge and experience is necessary),

\* to confront any given situation with similar ones experienced before and then to come to a correct decision,

\* to know how to execute with an appropriate skill level the previously thought solution without wasting any time.

Apart from being able to 'read' the situation in the game, an intelligent player can anticipate how the play is likely to develop thanks to the information previously processed. The ability to anticipate, which is always the result of good perception and decision making, is a significant tool for intelligent players.

To be able to draw his maximum attention fully on his problem or task at hand and decide quickly and intelligently about his next move, his technical skills should have been consolidated and automated beforehand. Doing so the quality of his game will be raised and the player performs at a higher level. It is necessary to make intelligence work for ice hockey in order to achieve a better game!

Nobody is born with a high level of game intelligence in ice hockey, but to develop their innate potential the player has to be exposed daily to a varied and progressive training program with simplified games. They are an ideal tool to unlock and develop game intelligence in any player alongside the acquisition process of many technical skills.

"A varied and progressive training program with simplified games is the best way to develop and improve intelligence in ice- hockey step by step "

## How a ice hockey player's intelligence manifests itself on the playing field?

## An intelligent player

- \* generally chooses the best option in less time.
- \* not only looks for the best solution to the problem he is confronted with on the ice by quickly weighing up all the various alternatives, but he also calculates the risk factors involved. He rarely loses focus until he has resolved the situation.
- \*knows in any moment of the match to give the adequate speed to the puck and to the rhythm of his team .
- \* is never rushed and feels secure and confident when performing a particular move anywhere on the ice. He controls with his eyes all the space around him, in front, behind and at any side, taking full advantage of both, very limited space and wide-open spaces! He always appears to have time. He knows that rushing and doing things too quickly tends to produce errors.
- \* always tries to achieve a balance between taking risks and safety. Too much risk could mean losing the puck or even the match, whilst playing without any risk rarely helps to turn the match to your favor. He is brave enough to take risks as he does not lack courage!
- \* stands out because he can adapt to the ever-changing situations in the game, to the umpires, to his teammates, to his opponents.
- \* knows that things do not always come off. This is why his performance level rarely dips after making a mistake or two or three in a row.
- \* knows when and where to pass the puck or when it is better to keep its possession.
- \*has good optical motor assessment or spatial awareness. Assesses correctly the distances between him and his teammates and the opposition or to the blue lines and the location of the goals, acquired in many years of practice with simplified games which also sharpened his decision making capacities.
- \*keeps it simple. Only a master, an outstanding player can play simple.
- \*knows what he is going to do with the puck before he even receives and controls it. He uses his creativity to the benefit of his team and teammates.
- \*knows to play hockey, especially without the puck, constantly making himself available for his teammates to which he offers possible solutions to many situations that arise on the ice.
- \* thinks and plays also for his teammates. He is a player who contributes all his qualities for the good of his team and don't play like an individualist who likes to show off. A player who doesn't use his intelligence to serve his teammates around him will never succeed in the game because he will then tend to perceive only few parts of the whole game, seeing plays completely isolated and not in context with the whole as it should be. This type of player doesn't realize everything that is taking place on the ice.
- \*frequently asks questions and quickly learns from his mistakes. He is good in memorizing a great variety of plays and reproduce them.

- \*only does what is within his capabilities.
- \* knows how to pace himself throughout a game. His experience allows him to make appropriate decisions such as when to run or when it is a waste of energy.
- \*is not affected by stress, knowing that a high level of stress tends to narrow his focus and perception capacity and also influence his decision making negatively. This explains why sometimes key players do not make a positive contribution in decisive matches. The pressure nullifies their usually intelligent play.

"As ice hockey is largely a cognitive game it is advisable to focus learning on constructing a significant knowledge database, achieved by a balanced interaction between player, coach and situations in context "

Eduardo de la Torre (1998)

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