Ballgame teaching – the Scandinavian way…

Anders Halling, Christian Engell, Torben Hansen
(Univ. of Southern Denmark)

Abstract

Since the introduction of Teaching Games for Understanding in the 1980ies lots of effort has been directed towards answering the fundamental question: How can the teaching and learning approach in ballgames be renewed so an environment that allows all students to take active part in ballgames is being build? This includes the fundamentals of good PE practice such as physical activity, games, performance, social interaction and individual reflection. On the basis of resent research results based on the Teaching Games for Understanding concept, the purpose of this article is to outline and introduce the new framework TEAMBALL (TB) and discus some of its basic premises.

The TB approach consists of four elements. At first the learning process must take place in a dynamic and well-defined team. All players need to be an integrated part of the game and be committed to this. Secondly all players should be able to perform in different positions and context of the game. Being an active teamplayer and challenged in central or key positions in the game is necessary to become a member of 'the society of ballgames players' where you experience and start to understand the very complex game patterns. Thirdly the learning process must start by setting goals for the players and the team. Fourthly the learning process consists primarily of practice in ballgames and lots of matches and competitions. The teamball practice is build upon a broad theoretical foundation taking a constructivist approach to learning and thinking of ballgames

Keywords: Teamball, TGfU, communication, relation, complexity, reflection.

What's going on in the gym…?

The following story is a reflection made by a PE student at University of Southern Denmark. She's part of a volleyball class and tells about her opinion of the game (From a reflection log written in close connection with a volleyball class):

> *I was very keen on the game and I felt that we were all in a good mood.*
>
> *When the game started I realised that our organisation was bad and did not work very well. Our agreements were broken again and again; our positions and functions were suddenly mixed up and our performance became a mess.*
>
> *At the beginning I tried to fight as much as I could in spite of the growing frustration in the team. At a certain point I failed to receive a serve and seconds later I hammered a smash into the net. Some of my team mates shouted at me: be ready, concentrate and worse … And I was about to loose my concentration. I tried to keep up my good spirit but it just didn't worked. There were too many negative vibrations; no team spirit and nobody seemed to care about it. Only*

negative shouting at each other. Frankly, at a certain point I just did not bother anymore and was about to leave the game.

Well, she seems to have a hard time in the game and her motivation for playing is about to disappear. She's not a poor volleyball player; in fact she is in the best part of the female PE student group, but right now she's about to leave the game. She wants to be by herself in the dressing room and she might even have tears in her eyes. What is going on? This is taking place in a quite experienced group of PE students in their second year of their study to become high school PE teachers in Denmark. The group consists of 14 male students and 11 female students at the age of 21 - 25 years.

This story - and lots of similar stories about such experiences in ballgame classes - raises the fundamental question in this article:

How we can teach ballgames in heterogenic groups and classes with different gender, skills and social and mental background ···So that ···All the players become active team players and learners in spite of their differences?

In our ongoing action research of the ballgame teaching aiming to give reasonable answers to this question we have been forced to put up other questions such as:

- How can we develop an including learning community in the ballgame teaching environment - instead of an excluding hierarchy?
- How to change the view on the students so that we see them as a team, "a society of ballgame players" - instead of single individuals?
- How to implement ballgame teaching based on a broader learning focus - instead of ballgames as isolated activities?
- How can we focus on the games in a holistic manor and have games as the outset of the teaching process - instead of focusing on the single activities?
- How can we change the core element of the learning process to competences and creativity (game sense and cooperation) - instead of isolated qualifications (ballgame techniques)?

The traditional Scandinavian ballgame context

In Denmark the students normally have PE lessons once a week in a double lesson (about 90 minutes). Ballgames often cover one third or up to half of all PE lessons in the primary and high schools. So ballgames are by far the most used disciplines in the PE curriculum. This corresponds to the situation in the Scandinavian society where ballgames are the most popular sports activities in the clubs and in the media. Therefore Danish kids are very familiar with games.

This introduction focuses on three themes that are essential in the ballgame teaching in Denmark:

- The ballgame approach
- The environment (mixed gender)
- The health focus and the learning focus

The ballgame approach is founded on the joy and the fascination of the game. Students and teachers want the lessons to be joyful moments during the school day. Sometimes the joy seams to be the objective of the ballgame teaching.

Furthermore the competition between two players or two team has a strong focus. In comparison with other PE disciplines ballgames has competition as a functional part of the learning process. No other discipline can benefit so much from the

competition than ballgames. When competing your goal is to perform your very best and at all times you are challenged by an opponent to do even better. This ideal learning opportunity is a privilege in ballgame learning in comparison to other learning situations in the school.

Furthermore the ballgame approach focuses on the building of an inclusive environment. The learning environment needs to be a place where everybody is appreciated for his or her position (role) and sense a feeling of belonging. However this including aspect can often collide with the competition aspect. This is where TB has a certain focus, in dealing with this paradox as a challenge that can be solved.

Consequently the intention is that ballgame teaching should be joyful with a lot of competition and at the same time performed in a society of players that appreciate each other, in spite of heterogenic circumstances and skills. Let us look into one specific and challenging part of the environment: the mixing of gender.

The ballgame teaching at schools is organised in groups (classes) of 20 - 30 students of mixed gender. The group (class) is the same in all the different topics throughout the school so you can imagine that the students come to know each other very well. It's a well-established tradition in Scandinavian schools that the students form a sort of community within the class and that they all are taught the same classes throughout the School. This is the fact even though the students have very different standards and experiences. The backgrounds for this organisation are the Scandinavian values of equality and forming learning communities. Especially the PE teaching is challenges by the mixed classes of students with different gender and quite large differences in abilities from student to student. Some of the students play games in clubs at quite high levels while other students hardly ever play games in their spare time. The ballgame-experienced students are familiar with the aggression[1] in the ballgames and they are confident in performing. The aggression in the game and their lack of confidence can result in passive participation and de-motivation by the inexperienced students; it's too dangerous or too masculine. An important element in the ballgame learning process is to be able to show aggressiveness and to be confident in taking actions and chances in the game. The ballgame aggressiveness is about being committed to the game, taking active part in the match, to use ones strengths and abilities at the best possible level and taking risks. The ballgame learner will not succeed in his learning process if he is not able to use his aggression in the game and if he doesn't take any risks. Then he will not be able to fulfil his position and so he will not be able to learn the key elements of the game. Again we have to remember that the ability and motivation to take risks is often connected to the trustworthy and appreciative environment we mentioned before.

However, another aspect is that showing and using aggression is often connected to a masculine attitude. Among the student in the ballgame gym there's no doubt that the women have more difficulties showing and using aggression than the men have. Women without ballgame experience are often ashamed of showing aggression in the game and feel that it is challenging their identity.

The experienced women players do accept their aggression in the game and identify it as a natural part of the game. But in games with mixed gender even the experienced women often tend to hold themselves back. But aggression is a natural

---

[1] We understand aggression in this ballgame setting as to take chances, to challenge ones opponent, to be a threat to defenders, to use ones body strength.

and integrated part of the game in most ballgames. According to this it's quite obviously that to learn, you'll have to be able to use your aggression in the game or else you will not learn to play the game.

Classes with mixed gender are a basic condition in the Danish schools. This fact calls for a change of the form and content of the ballgame teaching. The pupils or students might not be aware of the conditions in the ballgame teaching. Their thinking starts with the fact that "soccer is soccer" and "team handball is team handball" wherever it's played and whomever you are playing with. The problem of bringing this mindset into the ballgame gym is that you let the experienced students define the code of conduct for the game and the environment. They will take over the organisation of the game and decide the speed of the game and actually they might form an exclusive environment where only the best players can be members. The short story in the beginning of this article is an example of this.

A third characteristic of the PE teaching is the health concept. In recent years there have been a growing pressure on the PE teaches to include more health aspects to assure that all kids are physical active in their lives. The health concept do challenge the goals of the PE teaching in the sense that it increases focus on the burning of fat and pulse training than on the learning of different games and disciplines. This raises a lot of problems and discussions concerning the aim of strengthening the learning environment in ballgames and it even challenges the use of ballgames in the PE teaching. Not least the percentage of ballgames teaching in the Danish schools is challenged. This might be due to the fact that the main discussion theme seems to be, wetter the pupils burn their fat as quickly as possible.

To sum up this introduction there is some serious issues and challenges that needs to be addressed. Ballgames are widely spread all over the country and in the schools. The learning of ballgames is challenges by the environment, the mixed gender and the focus on isolated skills instead of playing games and by the health concept. In order to deal with these issues and challenges the ballgame teaching was inspired by the Teaching Games for Understanding[2] (TGfU) concept in the 1980'ies and 1990'ies. As in many other parts of the world modified games or basic ballgames, as they were called in Denmark, were implemented into the ballgame teaching. The problem was that TGfU didn't get much attention why many teachers never grasped the concept. This seems to be the same story in many parts of the world and is nicely expressed by the Australian Alan G. Launder who says that TGfU is "an aeroplane that only a test pilot can fly".[3]

There seems to be a lack of renewal into the ballgame teaching and one of the reasons might be that ballgame teacher's stick to what they know and feel comfortable with for example their own performances and experiences in 'earlier days'. They are often confronted with lack of time and they are not using reflection as a tool for developing their practice. Maybe they don't use reflection because of limited access to new ideas, mentors or reliable theories.

The aspiration for the rest of the article is to give some insights to new ideas, reflections and some theories concerning the learning and teaching of ballgames.
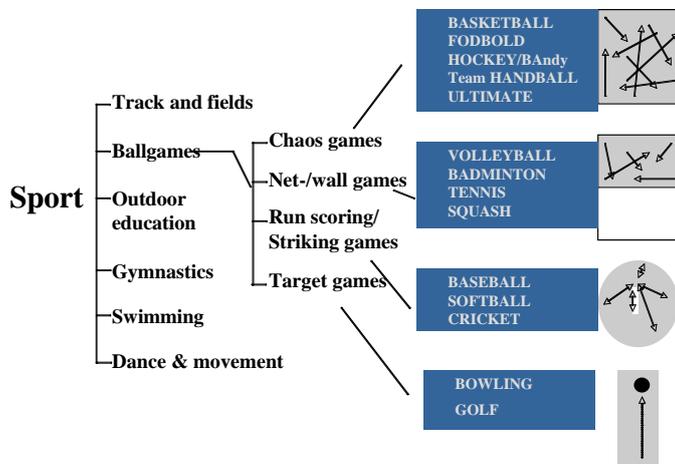
---

[2] The four ballgame categories are inspired by Almonds (1985) tactical approach to ballgames which analyse ballgames on the background of space and time. The teamball approach differs from Almonds including additional two perspectives, communication and relations among the players.

[3] Alan G. Launder, 2001

The learning and teaching of ballgames

What does a learner need to learn in order to play games and how does this influence the learning process? Our first answer to this question is to categorise ballgames into four different categories: Chaosgames, Net-/wallgames, Run scoring/striking games and Target games. The categorisation and examples of ballgames connected to each category can be seen in this figure.

The four categories are drawn from an analysis of how the games are performed concerning themes as space, time, communication and relations among the players (the categories will not be described in this article).[4]

The categorization gives the teacher a sense of what is important for the learners to learn and thereby what is needed as the central part of the teaching process. On the one hand the games in each category are performed almost identical in terms of space, time, communication and relations. On the other hand the games differ quite a lot from each others concerning the specific techniques and rules of the game. We find that the categorization points the finger at the most central learning aspects of the teaching process: The creation and use of <u>space</u> and <u>time</u> in the game and the <u>communication</u> and <u>relations</u> among the players.

The focus of the ballgame learning is the players' skills in creating space and time when the team is having the ball (typical in a chaosgame). And to diminish the space and time for the opponent's when they are controlling the ball. Obviously, you can say. But on top of that you must be able to establish functional relations with your team-mates and even with players in the opposite team and to communicate with them. Our point is that creating time and space will depends on the players ability to create well-known patterns in the game. This is only possible if the players are able to communicate effectively and use their relational skills. You might say that good technical skills will be as effective as using the communication and relation and we will agree. But our point here is to stress the basis of the teaching process, which are the relations and communication and not the technical skills.

At this point it's relevant to define ballgames as we see it. *Ballgames are systems of relations based on goal-oriented communication. The participants are players, who communicate with other players in a given context.*

In continuation of the categorisation and definition we'll present the Teamball approach to teaching ballgames. The approach consists of four steps:

1. Team-approach
2. Role and functions of the players
3. Personal and team goals
4. Competition and events

Team-approach

---

[4] This Categorisation is inspired from Almond, 1985 (TGfU).

In our lessons we often refer to the team as "the society of ballgame-players". We do this to stress our point of view that the team is essential in order to learn

TEAM

TACTICS   **TECHNIQUES**

ballgames. Let us go a little bit deeper into the team thinking.
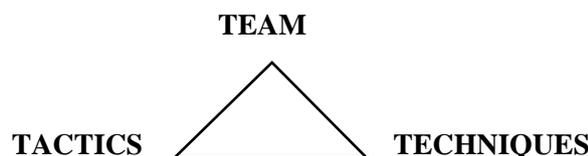
Teaching games in the TB concept is to have the team as the basic premise of the process and to focus on communication and relations. As we tell the students: 'In order to learn to play games you need to be able to communicate and to cooperate in a ballgame team. You simply need to be recognized and accepted as a team-mate to be able to learn the language of ballgames. If you are not, you will not learn to understand and play games!'

Thereby the team is the basic premise. The team is the setting of the learning process and thus the student's needs to be taught functional team competencies as communication, relations and cooperation within the game. We put all effort into the game and the match in order to use this setting as a tool of developing the player's skills. The player's find ways of forming the game and establishes functional patterns in the game that suits the team and the actual level of the relational technical and tactical skills. This is the team-approach.

The team-approach differs from the TGfU concept in the sense that TGfU has its point of departure in the tactics of the game. The traditional ballgame teaching has it outset in the technical skills. To stress our point here: we do agree that tactical and technical skills certainly are necessary for playing games. But we start the learning process in another context - the environment - and we find that the students learn the adequate skills for playing games and even learn these beyond the limits when using other approaches.

One of our students comment on the team-approach[5]:

> "I was so surprised of being part of a team. I think all players want to turn the team into a winning one. ⋯ I have become a better team player now that I have come to learn the other player's abilities"

Role and functions of the players

The team-approach does have some implications on the teaching process. The different roles and functions or positions of the players become important. The game can only be performed if the player's develop their relational and situative skills. We find that skills belonging to the individual player are less important than the skills performed in cooperation by two players. We don't use the expression 'a good ballgame player', because 'good' needs to be judged when the individual skills are put into function with the skills of another player. Therefore we always have to observe the pass between two players in an actual situation, because it can only be a 'good pass', if it's a catchable pass for the receiver. In the example at the beginning of the article the players obviously regard the skills as individually linked and not related to one another.

If we can succeed in changing the perception of skills from an individual matter to a relational one we have accomplished one step in the direction towards changing the traditional hierarchy among the players to a more functional one. This is a key milestone in the effort of building an including learning environment.

---

[5] In this part of the article we have included some students statements taken from the research we have done in practice.

Now, let us step into the ballgame gym and take a closer look at roles, functions and positions in a team. This is a volleyball class…There's a game going on. Two team 6 against 6 on the volleyball pitch. Paul is one of the players and he's an inexperienced volleyball player. He doesn't like to be in the setter position because his setting skills are poor.

The teacher now has different options on how teach Paul the setting skills. If he's a "traditional" ballgame teacher he might place Paul in a position at the back, and let a player with good setting skills stay in the setter position. Hereby the teacher tries to have the game going without to many disasters in the setter position. What about Paul? He might find himself excluded from the game or at least let alone in the back where he will do no harm! He will probably not learn anything else than how to stay clear of the game when the skilled volleyball players have their 'rally going'.

A "TGfU" teacher might stop the game and set up some modified small games where Paul in his own way can get some experiences into the skills of the setter.

A "teamball" teacher will let the game go on and ask Paul to step into the setter position and let him stay here during the game. In the on-going game the players will need to negotiate their actions and develop their relational skills. The other players need to find out how Paul wants the ball to be passed to him: high or low, near the net or far from the net and so on and they need to practice this in the game. What we are aiming at here is a dialogue between the players and agreements on how to perform at the best and how to take advantages of the relational skills and how to develop them. In this way we teach Paul's technical and tactical skills. We do it in a comfortable environment where Paul can be confident that he's also in the centre of the learning process and not let alone outside.

Personal and team goals

As outlined before the team is the basic premise of the learning process. This implies that the players form a team for the specific game for a specific period. The periods can be of different durations. But the team needs time for establishing team structures such as goals, agreements, criteria for success and so.

In forming the team every participant outlines his or hers goals concerning the learning process in the specific game. The team as well outline a shared understanding of the goals for the period.

The goals are directed at the learning process and connected to a specific game or task. The goals can be very different in an inhomogeneous group and all goals should be known among all participants of the group. The understanding of goals between the team members forms a very important media for exchanging understanding of the task and for raising the commitment for being in the team. This goal-setting procedure is an important step in achieving an including learning environment. The goals have a function throughout the period because they can be reflected and changed at all times.

Competition and events

The focus of the learning process is to develop relational skills so that every player in the team can use his or hers potential in the game. As described earlier a ballgame is hard to think of without the competition. It's right here, in the competition, that the individual player and the whole team solve problems in short moments, needs to concentrate, take on risks, make decisions and get feedback on all actions.

The problematic circumstances about competition can be the limited focus on the win-loose code. Intuitively competition is about winning or loosing, but when competition is integrated in a pedagogical context there must be other codes that need attention. Some of these are the learning process, the team goals and the personal goals. The students are so to say challenged by these other codes in the sense that the match must be evaluated by the learning code and the actual goals and not only by the 'win-loose' code. So our point here is that a match and competition must be seen or reflected through different lenses. A fine example is the 'Paul/volleyball' case. The 'win-loose' code will leave no space for Paul in the setter position, but the 'learning' code can provide accept for a period to develop appropriate game-sense and game pattern including Paul in the setter position. So what we are trying say is, that we must sometimes be able to play a game in which we focus on Paul's relational setting skills instead of only being focused on winning the game.

To be honest, this is not easy in practice because the 'win-loose' code is so embedded in the students that we consider it to be part of our tacit values both in the western society as a whole and in the ballgame practice. It takes time and motivation to train the student's skills in reflecting through different lenses and even to get them to accept these lenses.

> *I was surprised that all students participated actively in the lessons and the games – normally there's always a non-motivated group…*

Theory in practice

This was the end of the first set explaining the practice in the teamball concept. We are about to start the second set aiming at telling the story about the background and thinking of this practice. Please don't lean back. The game is still on and we will stay in the gym and practice some theories that can expand our knowledge of ballgame teaching and learning.

The story will focus on four subjects obtained from our practice and action research.

1. Community learning
2. Communication
3. Complexity
4. Reflection

Community learning

Our theoretical basis is a constructivist approach to learning with focus on forming and establishing the learning environment in a community of learners and teachers[6]. The described practice has its roots in theories of 'Cultural learning' [7], 'Situated learning' [8] and 'Community learning' [9].

We talk about the society of ballgame-players in our social practice and within this society the individual learning process is unfolded by taken active part (…and no to forget being included in the practice). We think of the learning process as an apprenticeship in which the participants have different competences and functions. These competences and functions are seen in a dynamic and changeable

---

[6] In our theoretical discussion we have basically been inspired by the work of Jerome Bruner.
[7] Bruner, 1996
[8] Lave and Wenger, 1991
[9] Wenger, 1998

view. We are so to speak all learners and teachers; not at same time but over a period of time. This is an example of how we use the legitimate peripheral participation of the theory. The key here is the acceptance and appreciation of all the participants' role and function.

In continuation of the active participation the social practice focus on

- Observation and imitation
- Feed back
- Conceptualizing
- Reflection
- Telling stories of the society of ballgame-players

The learning environment gives the participants different scaffolds in their learning process. An example of this is the possibility of observing the other players in different parts of the social practice. This can either be well structured or left over to the individual (and in between these). Another scaffold in the learning process is the conceptualisation of central parts of the social practice. This is especially important in the work with the different codes for evaluating a competition. Finally the storytelling about ballgames in society and about the social practice in the class is aiming at forming the including environment and giving all participants a deeper sense of the ballgame culture.

Communication

In our definition of ballgames we strongly focus on the communication and relations because we think of ballgames as communicative systems[10]. Communication in ballgames are regarded in a broad sense; that is the passing of the ball, the players movements and actions whether they are intended or not, gestures, talking and shouting, body language and so on. Communication in this sense is vital in all ballgames. In the chaos-games we find an interactive communication, in the net/wall- games and runscoring/striking-games we find a re-active communication and in the target-games the communication is co-active[11].

In our way of understanding the communication there is always an informer, at least one receiver and a media in which the information is send through. Here's an example of communication translated into ballgame language: the sender is the player controlling the ball; the receivers are one or several team mates trying to get into a good position and all players from the opponent team trying to guess what will happen; the media is the body and the ball and how the ball is passed to the receiver. In order to define the action as communication we need to have all three factors included: sender, receiver and media.

This form of communication establishes a social system of reciprocal relations, which constantly changes itself and establishes new social systems. And so the ballgame can go on. We find that ballgames are social systems, which are formed and continually changed by communication and relations.

Lets go a little bit deeper into this. When a message is send (a pass), it's normally send with an intension. But the receiver might not understand this intension; at least he might not understand it in the same sense as it was sent. So the intension of the passing player and the receivers understanding of this intension is what we are focusing on. This is about being able to interpret and

---

[10] This thinking of ballgames as communication is basically inspired from the work of Gregory Bateson and the systemic theories.

[11] These types of communication are analysed in Halling et al. 2005.

understand each other's signs, messages and passes in the game. Our aim is that the players find a shared understanding of the messages. This is the reason for focusing on the relational skills in playing games and hence put focus on what is going on between two or more players in the game. Communication in this sense contributes a lot in establishing the including learning environment by focusing on the understanding of each other.

Complexity

The central learning aspect lies in the understanding of this complex[12] communication and the complex movement patterns in the game. It's the complexity of communication and patterns that forms the game and makes the differences between kicking a ball and playing football.

Our thinking of ballgames as social systems implies our thinking of the ballgame as a whole. In this thinking you cannot simplify the ballgame without loosing vital characteristics of the complex communication and patterns. If these characteristics are lost in the simplifying process we find that the central learning aspects of ballgame teaching will disappear. So in setting up modified games as in TGfU you need to be capable of modifying without loosing the complexity of the game. If you don't succeed in doing this the learning outcome will be something else than your intension.

Our point here is that the isolated skill activities doesn't include the complexity at. This was the critic behind the forming of the TGfU concept in the first place. But furthermore we find that the TGfU concept also do simplifies the game in an undesirable manner. The modified games in the TGfU concept are more or less focusing on the isolated tactical skills in the game eg. the skills of defending or making a 'backdoor' (Basketball). What we are missing here is the context of the game: Which context of the complex game is the defender part of and under which circumstances is the backdoor being performed?

In order to teach ballgames in its own context we need to be able to simplify the ballgames in a way that maintains the relations and the communication codes. We do so by analysing the ballgames[13] into ballgame phases. For example we find that all interactive games consist of three phases: The 'possession game' with focus on creating space and time within relations and organising a safe game; the 'goal scoring game' with focus on the high-risk game play within relations and high speed in all actions; the 'defence game' with focus on diminishing space and time for the opponents and at the same time trying to be well organized in your own team.

By this pedagogical way of dealing with the ballgame teaching we want to establish both a complex learning environment and a very simple one at the same time. The complex part is to teach the students within each game phase so that they can perform together. The simple part is that we actually don't have to modify games and being creative in setting up new activities, we simply play the game or part of it.

---

[12] We use the term complexity in the sense of lack of information. Complexity and uncertainty arises in a system with lack of information. Ballgames are very fine examples of dynamic systems constantly balancing between situations with balance and unbalance; information and lack of information. The player's try individually and as a team to provide sufficient information in every situation but often they must decide actions in a moment with lack of information to a certain extent.

[13] We analyse the four ballgames in the classification as described earlier. The example is for the interactive games but we do the same analysis for all the other games in the classification.

So, by setting up the ballgame teaching within a realistic context of communication, relations and complexity, we want to give the students an opportunity to break the specific code for each ballgame.

Reflection

The last part of this theory in ballgame practice is reflection. We find that the learning approach needs to include reflection as an didactical tool because the student's physical skills and abilities can be extended by the reflection on the practice. Using structured reflection we try to reinforce the learning process.

As outlined we think of ballgames as dynamic social systems and it lies implicit in this thinking that reflection must be a part of the learning process of such a system. A player needs to be able to reflect his own actions and actions by other players in order to construct or reconstruct his actions and improve his performance. On top of that we must stress that reflection is vital in all the process of teaching students to become teachers.

The reflection process is a dynamic process between observation of oneself and of the other players. The self-observation is reflecting the feedback from ones actions in the game. The observations of others (team members as well as others) are reflection and understanding of actions in the team and the surroundings. Both of these observations and reflections are vital in the learning process of the player and the team as a whole. But it needs structure and focus to elaborate.

The observations and reflections can for example focus on different parts of the game and the learning process:

- The team; how do we cooperation in the game? How do we understand each other and do we share the understanding of situations? How do we make agreements and how important are they in the game?
- Personal competences; what is my motivation for the game? How is my role and function in the team and in the game? How can I use my abilities to perform the best I can in the team?
- Creativity; why do I act as I do in certain situations? How can new agreements in the team change the game for us?

In working with reflection we try to structure and give focus to the process by setting up questions for the students to answer for themselves, in groups or in the team. The questions are placed ahead of the lesson, in the lesson or between the lessons. By this structure we want to assure that we all have a shared understanding of the focus in our reflection process.

Let us give one example from the practice. In a period all students are having a 'game-twin'. All students are coupled in twins, so every player has a partner to observe and to do the reflections together with. In the game the twins keep an eye on each other in relation to the specific theme for the reflection. In the game-breaks they discuss their observations and might produce more reflection questions for the next game. After the lesson the game-twins evaluate their performance according to the reflection theme and the teacher might give new questions to reflect on before the next lesson; for example to reflect the practice in the light of some theoretical points.

Let us take the reflection a little bit further. We make use of different types of questions during the reflection process concerning our goal. At first we use so-called unified questions to state goals, facts and context for the reflection; for example: What is your goal for this game – what do you want to learn in this period? Or a more concrete one: How can you do an appropriate move in this

situation? The unified questions are very good in clarifying the situation such as different members of the team perceive it.

Secondly we use reflexive questions in order to challenge the player's knowledge of possible actions in the game. Reflexive questions are for example: which consequences does your movement in the game have on the performance in a certain situations? The reflexive questions are very good in making the players reflect on the governing premise of his decision-making.

Thirdly we use circular questions in order to make the player reflect on other possibilities of actions. Circular questions challenge the players analysis and judgement of a situation; egg. can you imagine other appropriate actions in this situation? The circular question gives the player an opportunity to select from alternative solutions and to find more appropriate ones in the situation.

> *Male student: I like the short reflection periods. They give me an opportunity to focus on the theme of the lesson and on the game. They give me a good feeling that we just don't play games for the game's own sake.*

Conclusion and future perspectives

This article has introduced a new Scandinavian way of teaching ballgames, TB. Four fundamental elements of the approach have been outlined:

1. The learning process must take place in a dynamic and well-defined team. All players need to be an integrated part of the game and be committed to this.
2. All players should be able to perform in different positions and context of the game. Only by being an active teamplayer in the game and sometimes even possess a central position you are allowed into 'the society of ballgame players' where you experience the very complex game patterns.
3. The learning process must start by setting goals for the players and the team.
4. Fourthly the learning process consists primarily of practice in ballgames and lots of matches and competitions. The teamball practice is build upon a broad theoretical foundation taking a constructivist approach to learning and thinking of ballgames

During the past decade the TB concept has been practised and developed. Most recently we have been doing action research in our own environment and other contexts. By now we have reached a level where our learning approach in ballgames is well founded in learning theories and methods for analysis of patterns in ballgames.

In spite of heterogenic teaching environment our researches have stated that the students reach a higher level of performance in playing games. At least they reach the same level of individual technical and tactical skills. Furthermore the students are able to reflect on the games and the learning process and thereby become capable of analysing and modifying games to different settings and players.

In the coming years our research will focus on the new challenges for the PE-teacher. There is a need for finding ways of changing the identity of the PE-teacher and to evolve the education of them. This is certainly important if the TB concept shall disseminate to the schools and high-schools in the years ahead.

Another research theme is to test if TB can contribute to more physical health for the pupils in schools. We have some indicators telling us that the pupils are much more physical active when being taught games by the TB approach than other approaches.

References

Almond L. Bunker D. Thorpe R.: *Teaching games for Understanding*. University of Loughborough 1986.

Bateson, G.: *Steps to an Ecology of Mind*. The University of Chicago Press, Chicago and London. 1972.

Bruner J.: *The Culture of Education.* Harvard University Press. 1996.

Butler J. McCahan B.: *Teaching games for Understanding As a Curriculum Model*. In Teaching games for Understanding: theory, research and practice. Linda Griffin and Joy Butler (ed). 2005.

Engell C. Hansen T.: *Boldspil og refleksion – håndtering af boldspilundervisningens dilemma.* In press. 2007. (Danish).

Griffin L. Patton K.: *Two decades of Teaching Games for Understanding: Looking at the Past, Present and Future*. In Teaching games for Understanding: theory, research and practice. Linda Griffin and Joy Butler (ed). 2005.

Halling A. Andersen B. Agergaard C. S. Worm C.: *Bolden I Spil.* Syddansk Universitetforlag, Odense 2005 (Danish).

Halling A. Laursen P.F.: *Boldspilundervisning*. Syddansk Universitetforlag, Odense 1999 (Danish).

Kirk D.: *Future Prospects for Teaching Games for Understanding*. In Teaching games for Understanding: theory, research and practice. Linda Griffin and Joy Butler (ed). 2005

Launder Alan G.: *Play Practice – the Games approach to teaching and coaching sports*. Human Kinetics. 2001.

Lave J. Wenger E.: *Situated learning . Legitimate peripheral participation*. Cambridge University Press. 1991.

Luhmann N.: *Social Systems*, Stanford: Stanford University Press, 1995.

Schön D.: *The Reflective Practioner – How Professionals Think in Action*. Basic Books, inc. 1983.

Snitkjaer R. Birch T.: *Brug bolden*. A master thesis at University of Southern Denmark. 2006. (Danish).

Wenger E.: *Communities in Practice. Learning, Meaning and Identity*. Cambridge University Press. 1998.