

Chess instruction methods in schools

Many children like to play chess. If it is fun, if they can be active and learn interesting things. The primary school is a natural environment to learn chess, during regular school lessons or in a club after school time. Decisive for a successful club is the presence of an empathic adult who can teach, organize and motivate children. In this article, some general points of attention and some methods are discussed.

Experience shows that in schools where such an adult is present, about 50 percent of the children want to be members of the school chess club. I invite you to think about the difference between these schools and schools where fewer or no children at all play chess.

There are good reasons to teach chess at schools. Chess is a metaphor for life and it can stimulate the development of children: social (f.e. analyzing together), emotional (f.e. deal with losing), cognitive (f.e. reasoning) and meta-cognitive (reflecting on your own behaviour). Partly this is intrinsically connected to the game, partly it is connected to the way chess is taught.

Apart from a well organised and effective teaching adult in attendance, success is determined by the method of chess instruction employed. You can define a method as a bunch of interconnected activities done in a certain way with certain goals in mind.

Key words of my own method are variation, fascination and participation. Lessons should be interesting, information has to be offered in a way children understand and they should be given the opportunity to discover all aspects of the game themselves. This involves not only imparting knowledge, but mostly playing games and positions and analyzing them. It is important that children experience success. Chess lessons should be an adventure, a nice exploratory journey.

In order to give interesting lessons, the level of understanding of the children in a group should be about the same and groups should be not too big. A maximum of twelve children in a group would be ideal.

Starting chess lessons doesn't require big investments. All you need are a class room and chess boards and pieces. A demonstration board is handy and a digital board and/or personal computers create extra possibilities and alternative/supplemental tools of instruction. If the children in the class have had some experience playing chess, you can think about introducing chess clocks. Notation forms can be made yourself (better on A4 format for younger kids). It is always wise to have interaction and dialogues with persons running or otherwise involved in other school clubs.

A point of attention is that there can be differences between chess in youth clubs and chess in schools. In clubs, the children are typically more motivated, the groups are not too big (about 8 or 10 children per group), the kids usually play more chess and the level of ability in a group is about the same. Some children have ambitions, play a lot, train a lot and need a training program and coaching about personal insight and self management. This makes sense when the child is devoting ten hours or more a week to chess.

In schools, children are usually involved in one hour of chess per week. If the lessons are obligatory and classes are bigger not all children exhibit the same amount of motivation. Levels of ability differ and sometimes particular character problems are at stake. If so, you should make some modifications such as split the class in smaller groups of children with the same level of ability. If children are playing only one hour of chess a week, variation is very important. A talented, motivated kid can play many hours of chess a week. Then one hour of tactics is not much. However, if you only play chess for one hour a week, one hour of tactics is far too much.

Children want to play and to explore. Playing is a natural way of learning. So take this as a starting point. When there is as usual an hour available, divide it into half an hour of playing (competition with pairings via f.e. free program Sevilla) and half an hour of lessons. If children don't know the rules

yet use, f.e., the Karate Kid Chess sheets. This is a bunch of small positions, f.e., a rook against four pawns. You explain how a rook moves and pawn, explain what is taking a piece. If the rook takes all pawns he wins, if one of the pawns crosses the board he wins. It takes two minutes explanation, some coaching in the beginning and children can play. The name is deduced from the movie The Karate Kid: a young boy learned separately several simple techniques and later he integrated them and became a good karateka.

In the lessons do two or three items a time. It is useful to start with a survey: ask children if they have questions or want to share experiences. A kid f.e. played at home a simul against family members or visited a nice chess website. So children can stimulate each other. Each lesson, do a few tactical exercises. Each two lessons analyze with the group, a game one of the kids played. Another week, do a variable activity. If you have a computer with internet, do f.e. a chess quiz on a website. This way, you can stimulate kids to do chess in their spare time. You also can give a simul to duos with an rook endgame. The duos learn by discussing with each other and they should have the winning side. Meanwhile, you explain things. For younger kids, fairy tales are interesting. Apart from the lessons, you can play a match against another school, organize tournaments etc. Another idea is to start a few weeks with Fritz & Chesster or a chess movie. There are more ways to Rome and mate.

Chess didactics

It is interesting a lot of articles claim advantages of teaching chess for personal development. It is interesting that not much is said about how chess lessons are given and the content of chess lessons. But for sure, to have effect the lessons have to be given in a effective didactical way. Didactics is about how to teach. Didactics is like chess: knowledge is not enough, you have to develop skills. Routines have to be developed. It is necessary to prepare lessons well and to evaluate. Also interaction and dialogue with other teachers is useful. Some points of attention, which you can use as a checklist when you prepare and evaluate your lessons:

- Fun is the biggest motivator while learning.
- When organizing chess lessons you have to consider practical aspects: good classroom (furniture, light, air, no noise), demonstration board, chess sets, if possible computer and digital board.
- Make a basic lesson plan with variation: f.e. weekly questions/remarks, tactics, and each two weeks game analysis and variation.
- Explain what the lesson is about and why.
- The level of lessons should be connected to the level of the pupils.
- Use variation in didactical techniques: explain, show, discussion, group work, games, exercises.
- Empathy is the basis. Listen well to questions and remarks of children.
- If a teacher is inexperienced, manuals of existing methods can be helpful.
- Go with the flow. Imagine you prepared a nice lesson and two kids played at home a game which they notated. Skip your program and invite them to demonstrate the game. Your program will do next week as well. Don't be rigid.
- Suggestions of children are welcome. Where possible, let children be the co-author of their own upbringing, create commitment. We do it together.
- Stimulate fascination by showing, f.e., interesting sites which pupils can visit themselves.
- Success experiences are important.
- Don't give too much information, via exercises and little games knowledge should be transformed in skills. Also sometimes self-study in duos via a site is possible.
- Learning goes well by discovering, use questions to stimulate thinking and understanding. The best is children discover answers themselves.
- Give time to think about answers. Quality goes for quantity.

- If different levels make small groups of the same level.
- Use several methods by which repetition is done in a playful way, f.e. let tactics come back in quizzes, mention them while analysing a game, show a video.
- Working with points (quizzes) can stimulate.
- Order. The classroom should be quiet without distraction. A relaxed atmosphere promotes learning. Chess is about concentration. Chaos doesn't bring anything. Shouting is forbidden. Make clear rules and explain them. Who doesn't cooperate is out. Dividing a class in small groups, who solve problems, directs energy in a positive way.
- Use words and comparisons which are connected to the level and experience world of children.
- Present information via different channels to get more impact: tell and show, f.e., on a demonstration board.
- While explaining on a demoboard give children their own chess set to try moves.
- Start lessons with concrete examples. Go from simple to complex.
- Give feedback on behaviour, not on persons.
- Stimulate chess outside the lessons by giving ideas about websites, playing games at home, putting chess sets in the school etc. Ask children what ideas they have. Create a chess culture.
- To get insight in individual children you can consider taking one minute interviews. Seven short questions are possible: What do you like in lessons, what not, what you like the most, what not at all, do you have any suggestions, what the teacher can do better, what you can do better. With each question ask also why. Write down shortly the answer. Report the result of the enquete later to the group and pull conclusions.

Parents can play an important role in school chess. It is important they realize the importance of chess for development of children. They can help in lessons, do the lemonade bar, take care of transport, they can help keep order, inspire kids, do the competition pairing and pay money for activities. With regular verbal contact and a newsletter they can stay informed and thus motivated to contribute.

Variation in lessons

Apart from teaching tactics and analyzing games of children, a lot of training techniques can be used for variation. For example: Quizzes, simuls, videos, playing together against computer programs, making a chess paper, newsletter or calendar, opening tricks and miniature attacking games, make a chess cross word puzzle, conduct a class interview with a kid who played a tournament, play with class against Fritz in 'drunk' modus, presentations by children about chess books, discuss a commented classical game via a quiz, children make diagrams to solve from their own games, make creative chess posters, make a chess blog on the Internet, play Raindrop chess, show 'the impossible' via studies of Saavedra and Reti, discussion 'how to prepare for a tournament' (sleep, tactics, self image), play endings via websites like www.idealchess.com, explain how to use a chess program, f.e., Fritz. A project could be to organize together with children a small tournament and divide tasks for small groups (playing venue, posters, playing schedule etc). You can extend the list by exchanging ideas with other teachers and check internet sites.

Methods

There are many methods, in many countries. Via Internet you might find quite a few, f.e. in the USA like Professor Chess and Chesskids. Myself I make an eclectic combination of some methods. In this article I will discuss a few methods which are widely used in Germany.

Fritz & Chesster

Fritz & Chesster is a series of chess programs developed by German children's book author Jörg Hilpert and chess trainer Björn Lengwenus. Children learn chess via a story of little prince Fritz and his cousin Bianca. They are challenged by king Black for a duel. The series is translated in several languages.

The story is told via four cdroms.

The chess program Fritz & Chesster is popular amongst children. A lot of them play it at home on the computer. The method is funny and didactically strong. It is a playful method full of variation: children learn with a lot of fun via a lot of little games and stories chess and also exercise skills in the process. Besides the cdroms there are a few books and puzzle books.

Chess instruction should be done in a playful way is the philosophy of the Hamburg school teacher Björn Lengwenus. In chess instruction, children should not be passive listeners, but they should be fascinated and actively involved via all kinds of activities. When their fascination is triggered, learning goes the best, Lengwenus states. It does not matter whether you are teaching in kindergarten or working with talented national youth players.

About Fritz & Chesster, there is a German website www.fritzundfertig.de. This is a initiative of the Deutsche Schachjugend and Chessbase. Trainer Bernd Rosen is the webmaster, but since he does it as a volunteer, he cannot devote as much time as he would like to it.

Lengwenus gave a workshop 'Spielerisch in Schachunterricht' for teachers during the German fifth School Chess Congress in November 2012 in Dortmund. About this workshop I made a video: www.youtube.com/watch?v=ZnK0ci119qE

Steps

A big frustration for IM Cor van Wijgerden is the fact that his Steps Methods very often is used too rigid in the form of a 'diagram method'. Although thematic arranged diagrams form the kernel of knowledge of the method, the implemation consists of a much broader philosophy and didactical approach.

The Steps method is developed by IM Cor van Wijgerden (1950) and the late Rob Brunia. The method consists of manuals for teachers and workbooks with compact essential information about subjects and exercises. The method is designed for children from nine years old. Later there came some extra workbooks for younger kids. Also there are cdroms.

In 1981, Van Wijgerden became national federation KNSB trainer and has, since then, developed study material for talented youth players. Amongst his pupils were some talents who subsequently became grandmasters, like Jeroen Piket and Loek van Wely. In The Netherlands, a lot of chess clubs have separate clubs for children. Also there are many school clubs. Very often those youth clubs are run by volunteers without much chess skills and didactical skills.

After local clubs, too, asked for study material Van Wijgerden decided in 1987 to cooperate with educationalist Brunia who had a lot of experience of training with youth players. By 1990, the first five steps and manuals were ready. The method is based on a clear structure so that inexperienced trainers are guided via the manuals about how to teach.

De 'Stappenmethode', as it is called in Dutch, is based on Dutch circumstances. Very soon, the Dutch chess federation declared the method to be the official federation teaching method.

The method should make progress from Elo 0 to 1800 possible. There were originally five steps. Each would take one year of study. Because there appeared to be a level gap between steps, 'extra' and 'plus' books were developed. Later a sixth step was added.

The method was renewed in a Tutor-method on DVD. Here also positions can be played and a lot of games to exercise are added.

In each step, there is attention for tactics and strategy, opening, middle game and endgame. Step 1 contains rules and basic skills, Step 2 gives combinations to 3 ply deep and some opening rules, Step 3 shows combinations, elementary positional rules and elementary endgames. In Step 4 there are

combinations with a preparatory move, attacks on the king and endgame strategy. Step 5 is about combinations, positional play and endgame. Step 6 is about tactics, opening strategy, middlegame and endgame.

By giving first examples with explanation and then making exercises about a subject, pupils are trained in pattern recognition, search strategy and, as a result, develop tactical skills. In the manuals, typical mistakes are mentioned as well as didactical advises how to teach.

All lessons follow a similar structure: the goal of the lesson is stated, prior knowledge is repeated, the pupil is taught how to acquire the new information followed by practice and testing. After several chapters, a repetition via exercises of mixed themes are offered. The trainer is advised to use several ways to support acquisition of new information: by telling, explaining and showing examples. Pupils get a brief summary of the essential information with text and diagrams as a help when they start doing exercises.

Reality [shows that] there is too often a gap between knowledge (know what) and skill (know how). Therefore Van Wijgerden advises not to go too fast with new subjects. It is much better to analyse with kids their own games and give feedback with respect to earlier on learned subjects. Via mistakes in games and in repetition exercises, trainers can check with subjects should be repeated in lessons. Exercises should best be done in several ways. Not only by making diagrams, but also to let children play positions against each other. This way children play little games and get more directed to pay attention of possibilities of the opponent.

Van Wijgerden warns for an information overload. He says generally 25 percent of a lesson at the maximum should consist of new information. The rest of the time should be devoted to playing and analyzing. Variation is important to motivate children and to give more grip on the game. A teacher for example can also play a position to kids via a simul. Mainly, he gets an idea of what kind of mistakes children make. Via a verbal questions and answers he can explain the subject again.

Very often one sees there is a big gap between knowledge (diploma Step 5) and mistakes (on level Step 2). The reason is clear: because clubs are mainly teaching knowledge without analyzing enough games of children, the knowledge isn't transformed into skills.

Good chess instruction, Van Wijgerden says, has to do with empathy (enjoying the game with the pupils) and good communication. So a teacher has to have patience (explain again and again), start with the level and point of view a pupil looks at a position and discuss (no monologues to kids).

Important is also a positive approach: emphasize successes, let the pupils enjoy making progress.

The core of the Step method is tactics. Van Wijgerden believes in a thematic approach. He rejects at random solving tactics of different themes as can be done via tactic servers or puzzle books. He is of the view that solving tactics around a certain theme helps with the development of the skill of search strategies. This should be done via orientation (what is characteristic for the position), finding candidate moves, checking them and evaluating the outcome.

As a result, the searching strategy will lead to a solution strategy: how to find the most effective move. By his method, Van Wijgerden emphasizes chess players will think systematical thinking and develop automated skills. The alternative is trial and error: guessing and missing.

As an exemple of a searching and solution strategy, Van Wijgerden gives the following position in an article in the book *The Chess Instructor 2009*. Finding Rb8 and Bc2 are unprotected and looking for an attacker the moves Qa7 and Qa2 can be found.



Van Wijgerden agrees that nice story telling adds much to chess. He admits he himself is not talented, but he encourages every teacher to do so.

Later on, after the books and cdroms, there came the Tutor-method. It contains also instruction lessons. There are more exercises and also a lot of little games. Via an engine, positions can be played. This makes it more easy to develop skills. Also Van Wijgerden is involved in the new Chessity project via the Internet.

Willemze and Rosen

IM Thomas Willemze was, for a few years, the talent coach of the Dutch chess federation KNSB. He recommends the Steps Method. As a six year old kid in 1988 in a local Leiden trainingsgroup, he was one of the first pupils of co-author Rob Brunia together with, f.e., GM Jan Smeets, IM Alexander van Beek and FM Frank Erwich. He grew up with the method which made him for sure a very tactical player. 'But this has to do probably also with my natural inclination and the fact Brunia was a tactical player. Apart from a method, a particular trainer is of much influence.'

It is very good the method later evolved with the Tutor method with a engine to play positions and a lot of games, he says. Pattern recognition is the basis of chess and this he considers is much stimulated by the method. Willemze stresses the misconception about the Step method it would be dull. The diagrams give a basis of knowledge. In the manuals trainers get lots of advices how to incorporate the knowledge and develop skills. This is by making exercises, playing games, analyzing games, using variation, making fun. Analyzing own games is the kernel, by it you integrate knowledge. Of course it is necessary teachers and trainers read and use this information. Solving diagrams should only be a part of chess lessons, as a basis. A big advance of the structured method, Willemze says, is that less experience trainers have a good basis and guidelines how to teach. 'But you should prepare your lessons well and implement them creative according to the class you teach. The method is not dull, the teacher maybe is.' Willemze himself gave also lessons to beginners on schools. 'Beware of too big groups and do not admit unmotivated children. Do not let the level of ability differ too much. My format in an hour: 30 minutes play and 30 minutes learning, which can be in the form of instructions and exercises, analyzing own games or various activities.'

German Trainer FM Bernd Rosen says, in general, he likes the Steps method with its clear learning concept and structured excersises. He doubts, however, if the method often is used properly because, on many occassions, only the exercises are done. Some methodological criticism of Rosen: he himself introduces the concept of mate very early to children, also he has doubts about accepting without criticism the material phase as the Steps methods does. Also, he wonders about motivation of most pupils to learn chess according on a very systematic basis (as advised by Tarrasch). He thinks the central idea in a training program should be the analysis of own games as proposed by Lasker (see Lehrbuch des Schachspiels).

LINKS

Benefits of Chess Education www.psmcd.net/Default.htm

Chesskid www.chesskid.com

Chess Kids Academy <http://chesskids.me.uk>

Chess Tutor www.chesstutor.eu

Ideachess www.ideachess.com

Karel van Delft www.schaaktalent.nl, www.chesstalent.com

OSCO Training Links www.okschess.org/training/index.htm#Training

Professor Chess www.professorchess.com

Sparkchess www.sparkchess.com

Research www.chessinschools.co.uk/research.htm

Richard James www.richardjames.org.uk/articles.htm

Simple Chess www.simplechess.com

Steps Method www.stappenmethode.nl/nl

The Chesswebsite www.thechesswebsite.com

Video GM Artur Jussupow meeting with chess parents about talent development

o www.youtube.com/watch?v=JW2gsowyQYA

o www.youtube.com/watch?v=wBD288RVnqM

Karel van Delft, December 2013

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