Introduction Model D

CGS Chess and programming

Introduction

This is an instructional material for chess training and programming for children between the ages of 8 and 12. The material can be used for both younger and older children / adolescents, as the methodology is universal. It is important to keep in mind that it is the teacher / instructor who knows his group best and therefore must adapt the pace of teaching, as well as the language and terminology used.

The goal of the teaching material

The goal of the teaching material is to develop cognitive and social abilities with chess as a means, and to introduce programming in a playful way. It's fun to play games, it's fun to solve tasks. With this as a basis, the chess training gives the self-confidence in the art "to think, they train their ability to concentrate, logic and mathematics. In addition, EVERYONE can participate on equal terms, and we attach great importance to the good atmosphere. We weave in the introduction of the subject of programming, which has clear connections to chess and the cognitive properties of the game, thus opening the digital world on which our real world is so dependent.

Overview and teacher's guide

Each lesson begins with an overview of the different steps. Then comes a teacher's guide where you go through the steps in more detail. The idea is that you as a teacher / instructor can prepare with the help of the teacher's guide and then use the overview as support during the lesson itself.

The SMART method and the Game method

The didactic methods used in the chess part of the instructional material are the SMART Method and the Game Method.

SMART stands for English acronyms: S = Selflearning, M = Motivation, A = Adjustment of level, R = Range of Activities, T = Technology.

A summary of the SMART method is this: When teaching, you must remember that it is the student who must understand. This means that an important part of the teaching is to let the students try for themselves. To develop, you must be motivated. An important role for someone who teaches chess is therefore to find each student's motivation and to try to find a way to teach that keeps the motivation alive.

If you want to develop the student's natural interest and enthusiasm, you must adapt the tasks and exercises to suit them. To maintain the motivation for learning, there must be a variation in the teaching - in how the lesson is presented, the activities that are carried out and what types of interaction the students have. Finally, chess is perfect for the digital world, and there are more opportunities to support teaching with technology for both training and games.

The game method is an important tool for the SMART method. It is developed from the knowledge of how good it is to let children play as much as possible to develop, but also for the play method fits perfectly in larger teaching groups in the school environment. In the Game Method, chess has been deconstructed into simpler, less complex, games than classic chess, which is why it is gradually acquiring new knowledge. Two advantages of using games as a basic educational method are that everyone loves to play games, but also that the mini

games can be enjoyed by the absolute beginner, as well as by the master and they can both have great fun from them, because they play on their level.

How do I plan the room?

The meeting place - A place for introduction, instruction, individual problem solving and conclusion. If you do not have access to extra tables, you can wait to present boards and chess pieces.
Game tables - Tables with chessboards. One board for two children.
Demonstration board t - Set up so that the children can see it both when they are sitting at Meeting place and
at the Game Tables.
The whiteboard - Should be placed so that you can see it both from Meeting place and Playing area
The smartboard / projector screen - Should be placed so that you can see it both from Meeting place and from Playing area

A basic lesson plan

1) **Introduction at the gathering place.** The teacher repeats what happened last time and tells what should happen during the lesson. He or she can also tell something inspiring about chess that stimulates before the lesson itself. In this material we call it the Anecdote of the Week.
2) **Instruction at the demonstration board.** The teacher presents today's theme.
3) **Students solve tasks on the topic of the day at the gathering place or at the game tables.**
4) **Students play minigames at the game tables.**
5) **End at the gathering place.** The teacher summarizes the lesson.

How to create a good playing situation?

Important to get good chess teaching is to create a good atmosphere where everyone is welcome, and a game situation where it is possible to concentrate and think. The best way to do this is to immediately introduce a code of conduct. This is the one we recommend:

1) Play quietly
2) The instructor decides
3) Greetings and thanks
4) Touched piece
5) Dropped piece
6) Stand up for yourself

In order to be able to think, you need to create "a room for concentration". In the game situation itself, it is therefore desirable that a calmness prevails in the room, and that the children avoid talking, at least loudly, and only about what is related to the game. One tip is to use "a sign of silence", such as thumbs up, which shows the children that you are now speaking too loudly.
If you want to get a room of concentration, it is important that the games that are played start at the same time. Otherwise, it will be easy chaos. Therefore, everyone prepares for games, but no one starts their party until the teacher sees that everyone is in place and ready and gives the start signal.
In chess, you show respect for your opponent. The ritual is that before the party you greet, and after the party you thank for a good match. The normal way is to shake hands, but in the aftermath, it may be better to find something similar, but without physical contact.

Touched piece and Dropped piece means that when you have touched a piece you have to move it, and once you put it down on a new square, and released it is the opponent's move. These rules curb potential conflicts and also train you to "think first and do later". Finally - when you have finished playing, check that all the pieces are there by setting them up in the starting position. Not least before putting them in the box.

Being a chess teacher where the game method is fundamental is very much about organization. It is important to be prepared for the various elements of the training, but also to have a clear plan for how the game situation is carried out, and the tournament formats presented in the material.

Programming

For the programming part, the goal is for the children to learn SARA: Sequence, Alternative, Repetition, Abstraction, which is the basis for programming. We do this by mixing physical exercises, chess pieces, and by working in the computer program Kojo.