# Learning chess

# Manual for chess trainers

# Step 4

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# The fourth Step

The transition from Step 3 to Step 4 is greater than from Step 2 to Step 3 and is partly similar to the level difference between Step 1 and Step 2. It has to do with the number of moves required to solve most of the tasks in each step. In Step 1, this is a move by White or Black to mate or gain material. Step 2 adds a full move: White plays, Black answers and White scores. Now in Step 4,  $2\frac{1}{2}$  moves are needed to win. This applies to the vast majority of exercises.

At the turn of the century, some users felt that the transition from Step 3 to 4 was (too) big. Not for everyone, and the difference has to do with the amount of attention that was paid to skills and their improvement in the lower steps. Nevertheless, this was one of the reasons why Step 3 plus was the first of the additional workbooks to be published (2002 in Dutch). For those trainers who only have the basic books made, there remains a gap between Step 3 and 4. We explain this.

It is useful to reflect on the road travelled since the beginning of Step 1 and what bumps there were (and perhaps still are!) along the way. In Step 2 of the manual, under the heading 'Characteristics of children's play' (a large group because we have to include all beginners), there is a long list.

Anyone can learn to play chess, although the rules of the game are not that simple. Most obstacles are temporary and disappear of their own accord. A real stumbling block for everyone is mastering the board vision. In simple terms, this means being able to play safe moves and take advantage of your opponent's unsafe moves.

As your playing strength increases, unsafe moves can become safe. This number increases rapidly, just think of unsafe moves that win material within a few moves.

Mastering the interaction of the pieces in attack and defence and having a good view of the space effect of the pieces is a long process and takes time. To play a good move, we need to make use of the essential characteristics in the position. Knowing and recognizing targets is a great help in seeing what is vulnerable in the opponent's position. Thanks to tools such as the double attack, eliminating the defence and other combinations, we learn how to turn vulnerability into material gain or even mate. Partly by solving the tasks, the students learn to think ahead 'automatically'; they can 'see' the position in their mind after one and a half moves and assess it.

This is all very well for those chess players who have been properly coached and have gone through many workbooks. Note, not just by solving exercises, but by being helped with the necessary feedback.

Now more and more chess players are switching to solving puzzles on a screen. This has both advantages and disadvantages.

We will explain two disadvantages (see all the other manuals for other points of interest). With a computer, the student sees the position on the screen after each move. So there is less need to hold positions in working memory after one or more moves. This skill, which is essential for thinking ahead, is not practised enough. This process already starts in Step 1 and the consequence, especially for longer variants, is extremely questionable. Step 2 adds a skill that is 'automatically' practised when solving on paper, but is less necessary with the computer. This is finding and judging the answer to the planned move. That's more moves. The computer's countermove is only one, and it comes automatically. There is no need to consider alternatives.

Superficiality trumps because real thinking is less necessary.

Naturally, the standard of play suffers. This creeping danger is not sufficiently recognized. The inability to think ahead is ruthlessly exposed in Step 4. If you still have to think about whether a move is safe, your working memory is quickly overloaded. Thinking about other possibilities on the chessboard, is not ideal at best. Of course, this is even more difficult if you have to think several moves ahead. In Step 4, where one more move is required, you may not be without a chance, but you are far from optimally prepared. The board vision should be fully automatic in the starting position.

In short, the lessons in this step are only meaningful if the students have successfully completed the previous steps. This means not only that the students have passed the tests, but also that they have managed to apply the relevant knowledge to their games. If the students don't have the skills required for Step 4, then presenting them with new information is likely to be counterproductive; knowledge and skills must go hand in hand.

As for the trainer, we assume that he or she is familiar with the didactic approach as outlined in the previous manuals.

In a nutshell: teaching, letting the students practise, playing games (in a simultaneous and among themselves) and discussing the games played by the students.

### **Eliminating the defence**

#### AIM OF THE LESSON

teaching tactical skills

#### **PRIOR KNOWLEDGE**

- all forms of eliminating the defence
- attack

#### ACQUISITION

#### Introduction

Eliminating the defence is preparation for material gain by capturing an unprotected piece or with a twofold attack (see Step 2). The piece you want to win is protected. We eliminate the piece that protects by capturing, luring or chasing away. In this lesson, eliminating the defence is the supporting aid to the double attack. The protecting piece is the main target, but not only. Pieces that get in the way we eliminate in the same way. See also the examples on page 9.

#### Instruction

The diagram  $(\clubsuit)$  shows how we can use the three basic forms capturing, chasing away and luring. The targets in these positions are clear: the king and the unprotected rook on g3. In short, the winning double attack is already in the picture (1. Qe5+ wins a rook). That move is still unsafe at the moment.

The protecting piece immediately disappears from the board after **capturing**: **1. Bxc6 bxc6 2. Nxa5**.

Chasing away is the second simple solution: 1. d5, less compelling but equally effective here. Black is best to leave the knight and play 1. ... Bc3. White does win the knight.

The knight on c6 has two protecting tasks: square e5 and Ba5. Overload, in other words. After **luring away** with **1**. **Nxa5**, Black loses material.



#### Capturing

On the left in the diagram  $(\hat{u})$ , the rook on c4 is protected. First, White captures the rook's defender: **1. Bxb6 cxb6** (not obligatory, but Black always loses material) and then he collects the loot with **2. Qa2**+. The preparatory capture is necessary because on immediately 1. Qa2+, Black avoids losing material by interposing the rook: 2. ... Ra4 (not 1. ... Kb7 2. Bxb6).

On the right, the queen on e1 is lost after 1. ... **Rxg2+ 2. Kh1** (2. Rxg2 Nf3+) 2. ... **Rh2+** (luring) 3. Kxh2 Nf3+.

Whether there is an exchange (left) or a sacrifice (right) does not matter. The defender disappears, and material gain is a fact.

In the diagram ( $\Rightarrow$ ), there are no direct targets. Everything is protected. Looking no further, a move like 1. ... Rc7 is quickly played. After all, Black is in a good position. Thinking first and then moving is always better. The white knight protects both possible targets (e4 and h1). Capturing the knight with the cheapest piece is very obvious. After 1. ... Bxg3 2. fxg3 Qxe4+ the e-line is open and the pin 3. Re2 wins the queen. Better to give points first with 1. ... **Rxg3 2. fxg3** and then 2. ... **Qxe4+** will do. After 3. Re2, Qxh1+ is now possible.

In the diagram (\$), Black has with 1. ... Nb1 a double attack. This does not work well because White even has a winning refutation: 2. Rd8+ (after the lazy 2. Qxc6 Rxc6 3. Rd6 Rxc2, White is hardly in a better position) 2. ... Rxd8 3. Qxc6. Black has to exchange the queens first and that this improves the white pawn formation is unfortunate, but gaining material comes first. After 1. ... Qxf3 2. gxf3 Nb1, Black wins easily: 3. Rd6 Nxa3 4. Rxa6 Nxc2 is not difficult.







#### Luring away

In the position in the diagram  $(\hat{\mathbf{r}})$ , the double attack is easy to find. The king is a reachable target, and the rook on d1 is unprotected. Unfortunately, Black has a defence after 1. Qb3+. He answers with 1. ... Qd5+. The check is lifted, and the rook is protected. White has to prevent the queen's move and lure away the queen on e5 with **1. Rxg7**+. The queen is no longer protected so capturing with the king is not possible and so Black has to play **1. ... Qxg7**. After that **2. Qb3+** is winning.

The diagram  $(\Rightarrow)$  shows an example with luring away the protecting piece. In practice, this is the form that occurs most often. Perhaps also because the protecting piece immediately catches the eye.

Black can with 1. Qe4 threaten mate in one. Square g2 is the first target. From e4, the rook on c2 is also under attack. The white queen protects the rook, so the task is: luring the queen away, and that can only be done with 1. ... b5. The queen cannot continue to protect the rook, a2, b3 and c6 are unsafe. After 2. Qxb5 Qe4, White has to give up the rook.

Luring away and chasing away (that will come up later) are close together in such positions. Put **å** a7 on a6 and b5 is chasing away.

Double attacks with other pieces can be made equally possible with luring away.

On the left in the diagram  $(\mathcal{P})$ , Black has to lure away the b-pawn. Let the students figure out for themselves which of the two knight moves leads to the winning knight fork. Winning is **1**.

... Na3+ 2. bxa3 Nc3+. After the other knight move, Black loses: 1. ... Nc3+ 2. bxc3 Na3+ 3. Bxa3.

On the right decides **1. Rh8+ Kxh8 2. gxf7**. Nothing helps: **2.** ... **Ree5 3. f8Q+** or **2.** ... **Rdd8 3. Rh1#**.







The defender standing in the way now has his turn. If no safe check is possible due to a pawn shield to the king, we use the same technique as for mate in two access (Lesson 4 in Step 3).

On the left in the diagram ( $\hat{\mathbf{1}}$ ), the unprotected black rook is a target, but a second one is missing. With **1. Nb5+**, White forces **1. ... axb5**. The a6-pawn is gone, and a check on the a-file is possible. White wins the rook with **2. Qa2+**.

On the right, White takes advantage of the queen's pin so that after **1**. Nxg6+, Black has to take with the pawn **1**. ... hxg6 (1. ... Qxg6 2. Qf8#). The h-file is open and the double attack **2**. Qh4+ wins the black rook.

In blocking, we use check to put enemy pieces on a flight square from the king. In this theme, check can serve to luring away a piece or pawn to allow a double attack.

On the left in the diagram ( $\Rightarrow$ ), the bishop helps. After **1. Bd4+ b6**, White can check on the 7<sup>th</sup> rank and win the rook with **2. Qd7+**. On the right, the queen does the job alone. Black can open the h-file by luring away the defending bishop. A check on e1 then enables a double attack: **1. ... Qe1+ Bg1 2. Qh4+**.

#### Chasing away

You can also chase away a piece that prevents a double attack. In the diagram  $(\mathbb{A})$  we see the two possibilities. On the left, the queen check on a4 is useless because the bishop on d4 is protected. Chasing away the protecting rook with **1. Kc1** does work because the rook cannot continue to protect the bishop.

On the right, the knight on h4 prevents the knight fork on g6. After 1. g3 Nf3 2. Ng6+, White wins the exchange.







Even in fuller positions with known structures, finding the right solution is not difficult.

In the diagram  $(\hat{v})$ , the two unprotected black knights can distract for a while because 1. Qb3 is an obvious attack. Black defends both pieces with 1. ... d5.

Another target is a possible mate on h7 if White could play 1. Qd3. The solution is obvious. White has to chase the knight away with **1. a3**. After **1. ... Nc6 2. Qd3** mate is imminent and the knight on c4 is lost.



In the diagram ( $\Rightarrow$ ) the knight on c6 is unprotected. White would be in a much more active position if after 1. Qd6, the knight should play, but 1. ... e5 protects the knight.

He has to chase the queen away from f6 to make a second target. After 1. g5, the piece in the way disappears: 1. ... Qe7 2. Qc3+.

Positions with one target you can solve by searching for a second one in a targeted way.

#### Interfering

In the diagram (\$), giving check with 1. Qd6+ does not amount to anything because both rooks are protected.

With the surprising **1**. **Nb5** the connection between the two rooks is broken, after which a double attack on c7 or d6 becomes possible, all depending on which move Black will play.

Also on the right, Black wins material by interfering. After 1. ... g4 it is best for White to give up the knight or the bishop, or else a knight fork on f3 will follow.





#### X-ray check

Sometimes, preparation is also needed for an X-ray check. On the left in the diagram  $(\hat{T})$ , 1. ... Ra2+ 2. Ba3 Nb6+ 3. Kb3 surprisingly loses an exchange. Black can eliminate White's defence with 1. ... Nb6+ 2. Bxb6 Ra2+ and that wins an exchange.

On the right, White seems to win a rook with 1. Rhg4+ but this is not true. After 1. ... Kh6 the black rooks protect each other and the win is gone. The preparatory move is really necessary. First, the rook on g1 has to be chased away with 1. Kh2. Then after 1. ... Ra1 2. Rhg4+ White wins a rook.

In the diagram  $(\Rightarrow)$ , the black's position seems fine. White cannot attack the two unprotected pieces. The king has some limited freedom of movement, but the number of white attackers is limited. The fact that pieces can get in the way helps in finding the solution. Pawn d7 should not be there because the black bishop would be lost with an X-ray check.

White therefore starts with 1. **Rg8** to threaten mate. A move with the d-pawn is forced and after 1. ... d6 2. **Rg7+ Kd8 3. Rxb7 dxe5**, White should obviously not take back on e5 but play another capture: 4. **Rxb4**.

#### In-between move

The defence against the X-ray attack in the diagram (♣) consists of avoiding a saving check. The direct 1. Rg2 will lose the rook after 1. ... Ne3+. Also after 1. Re1+ Kc2 2. Rg1 Black saves himself with a check on e3. First, moving the king out of reach of a check is the correct way to win material. White can threaten mate on e1 with **1. Kb3**. After **1. ... Kc1 2. Rg2** is winning.







#### Search strategy

The search strategy is not difficult with this preparatory move. There is a double attack in the position, which does not work yet because there is a defence. The defender, which is preventing this double attack, has to be eliminated.

In the diagram  $(\hat{v})$ , White still has sufficient control over the e4 pawn, losing a defender will be fatal. With **1.** ... **Bb4** Black attacks a defender with tempo. White first has to defend his knight. After **2. Bd2 Bxc3 3. Bxc3 dxe4** White loses a piece.

In games where you don't know if there is a winning move, things are a bit trickier. In the case of a clearly visible double attack, no: find the defender and eliminate it. However, the examples in this lesson show that the theme has different forms. Recognising those does provide support.

In the diagram ( $\Rightarrow$ ), Black is to move. The unprotected rook on b1 must lead the way. The king should become the second target. For now, a piece stands in the way on all sides. The only attempt is 1. ... **Bxg3+**. We just have to see which double attack there is after taking back. The easiest is 2. **Nxg3 Qa2+**. Luring away and making access, as well as 2. **Qxg3+ Qf5+**. Luring is 2. **Kxg3 Qg6+**.

#### PRACTICE

#### Reminder

 $\diamond$  Double attack: Eliminating the defence

#### Workbook

□ *Double attack / Eliminating the defence: A* Explanation: All exercises are double attacks with the knight. A double attack is





# Additional workbooks

During the development of the Steps Method I was the national trainer of the Royal Dutch Chess Federation for youth, women and over-age talented youth. Around the 1990s, initiatives to expand chess training in the Netherlands developed at a fairly rapid pace.

Chess clubs took over Steps 1, 2 and 3. Most schools did not go beyond Step 1. For Step 4 and above, young chess players could go to the larger youth clubs and some smaller ones which organised joint training sessions for these groups. Some of the regional federations trained different youth groups in different age categories. The top players took part in the national training. These were one-day training sessions and a long weekend training camp. As a result, many training materials have been developed for all levels. Most of these have been incorporated into the current workbooks.

The basic learning was familiar from the manuals and workbooks (only 5 of each). This is knowledge that the students can use in their games. This is necessary for the students to find the lessons useful. This learning is divided into parts that are interrelated (high agility, transfer). It is essential to implement differentiated learning for both stronger and weaker players.

In addition to the basic workbooks, there are 'Extra' (all 6 Steps), 'Plus' (Steps 1 to 5), 'Thinking ahead' (Steps 2 and 3) and 'Mix' (Steps 1 to 5). These are not just books with a few exercises. A number of things have been taken into account:

required prior knowledge;

All the exercises refer to topics that have already been covered. These may well be difficult positions, as long as you know how to solve them.

appropriate level;

What is stored in your memory, you should available when you need it. We narrow the gap between 'present' and 'can apply' by using it more often. This works best when the tasks are at the right level of difficulty. With the additional workbooks, this has been reasonably successful. If not quite, then I change the less appropriate positions. For this reason alone, it is convenient that the answers are no longer in this manual.

Nowadays, there are many ways to solve tasks on the Internet. Websites are trying to outdo each other with the number. The more, the better. What is missing

is a thorough classification by level. To become stronger, you need tasks that are your strength and a little more difficult. The emphasis is on the result and not on learning. The chess player is mainly concerned with his specific Elo for solving the puzzles.

- usefulness;

This is especially important from the learner's point of view, but not only. In tasks that practise certain solving skills, this is not always obvious and we have to explain the point. This is the case with chess problems, for example (see Lesson  $11^+$ ).

The importance of the subject within chess.
Not the most important point, but crucial in case of doubt. The rook ending is more significant than the knight+bishop ending against rook.

Many students take the next step as soon as they finish the current one. There are many arguments against this. Generally speaking, playing strength increases at different rates. Therefore, the first thing students should do is play more games. It always takes more time to apply what you have learned. The quality of the games played will always show this. In addition, the basic skills of the lower steps are often lacking.

Remedy: eliminating the weak points first is enormously effective. The mix book Step 3 (or even 2) or the thinking ahead workbooks can help.

Thanks to the additional workbooks, students get more practice at the same level, which means that they spend more time on the concepts covered in a particular step. It is important that the level of difficulty does not increase too quickly. In a way, this allows us to counteract the damage that might be done to many students if they move on too quickly to the next step and find that the leap has been too big.

#### Step 4 extra

Since 2017, the Step 4 extra workbook is only available in an international version. In this workbook, there are 55 pages with exercises, which means as many as  $55 \times 12 = 660 - 21$  (drawings) = 639 positions.

The reminder with hints on how to proceed with the mixed tests can be downloaded: stappenmethode.nl/en/gs/en\_gs\_4e.pdf.

The workbook contains mostly exercises on the same themes as those appeared in Step 4 or below. Initially, these are useful as extra practice. The better you master each topic, the more likely it is to be recognised in a practical game. Knowledge that has been automated is ready to be used from long-term memory, which makes it easier for working memory to have enough space for thinking. This is particularly important when two or more moves have to be thought ahead.

When we rush through the steps at a very high speed, it takes its revenge, so that too few things go 'automatically'. Working memory is overloaded, and this often results in elementary things from earlier steps being missed.

On the last 11 pages the exercises are all mixed up, and so there is no indication of the theme of each one. These exercises are the closest to a real game.

Also, repetition is very important. Revision is necessary. The reason we repeat things is so that we don't forget them, so don't forget to repeat.

Subjects from a previous step that are not covered in Step 4 need to be addressed again.

#### Step 4 plus

As of 2017, the Step 4 plus workbook is only available in an international version. The 10 reminders have been removed from the book and only are available for download: https://www.stappenmethode.nl/en/gs/en\_gs\_4p.pdf. The consequence is that there is room for more than 100 new tasks (644 in total now).

In this book, there is space for:

- New themes are:
  - trapping (preparatory moves: luring, eliminating the defence, chasing, targeting and clearing).
  - vulnerability in the opening
  - mini-plan (opening the position)
  - solving problems
- Themes that are not given enough attention in the basic Step due to lack of space.
- More in-depth treatment of important topics.
- Themes taken from a previous Step, but at a higher level of difficulty

We cover all the themes in 11 Plus lessons. Many of these can be short. Some have been greatly expanded in this edition. The main point is that the students can solve the exercises correctly. We don't recommend skipping the instructions.

#### The Steps

#### Books

The following books are available in the 'Steps Method' series:

Manuals for chess trainers:	Step 1, Step 2, Step 3, Step 4, Step 5
Manual for independent	
learners:	Step 6
Basic workbooks:	Stepping stones 1, Stepping stones 2, Step 1,
	Step 2, Step 3, Step 4, Step 5, Step 6
Extra workbooks:	Step 1 extra, Step 2 extra, Step 3 extra,
	Step 4 extra, Step 5 extra, Step 6 extra
Plus workbooks:	Step 1 plus, Step 2 plus, Step 3 plus,
	Step 4 plus, Step 5 plus
Mix workbooks:	Step 1 mix, Step 2 mix, Step 3 mix, Step 4 mix,
	Step 5 mix
Thinking ahead workbooks:	Step 2 thinking ahead, Step 3 thinking ahead

Updated information can be found at our website: www.stappenmethode.nl (EN, FR, DE, NL)

All books can be ordered from this website for worldwide delivery:

#### http://www.chess-steps.com/

#### Software

The Chess Tutor for Windows is a series of chess learning software based on the 'Steps Method'. **Chess Tutor Step 1**, **Chess Tutor Step 2** and **Chess Tutor Step 3** are available as download or as CD. You can first try the Chess Tutor using a free demo version.



More information at: chesstutor.eu/en

