Skills for Chess

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Abstract

Following our paper on Bloom's Taxonomy and translation assignments, and that was called Translation Techniques, and the lists of skills we presented in Interpretation and Translation, volume 1, and Your Mother Tongue Is Helping Me, we now present the skills that a chess player needs to succeed in their trade. This all connects to the research project called Teaching for Freedom, which includes the book Multilevel Method. Multilevel Method has just gotten a few good words added to its list of editorial reviews with Amazon.com. The techniques used to build these results are those that involve observation, comprehension, analysis, and synthesis, for instance. The tools used are empirical observation, informal assessment, and comparative tables, just to mention a few.

Keywords: Skills, education, translation, interpreting, chess, bloom

Introduction

We worry about transferable skills, not simply skills. We worry about selecting and naming the skills in a fashion to optimize their application to human life. In this way, if we have observational skills and contemplative skills, we choose observational because those are useful in Science, art, and all else, but contemplative gives more the idea of being useful in arts, so say with paintings.

We deeply believe that everything connects to everything else in the cosmos, so that we should always be able to find skills that are useful for something else, regardless of the entity we study.

If we randomly select two sigmatoids, so say chess and Mathematics, we should be able to find skills in common. In the case of the couple we just mentioned, (chess; Mathematics), we could select observational skills, abstract reasoning, synthesis abilities, etc., like a set of skills that are common to both worlds: The World of Chess and the World of Mathematics.

Perhaps we could think of a couple that would shock us, say (professional prostitution; chess). What would these two activities have in common, one wonders? Well, first of all, we need to react appropriately in both cases: If the prostitute's client starts becoming aggressive, she must find ways to calm him down, so that she does not get bashed up. If our opponent in chess becomes more aggressive in terms of the game, we need to become more defensive.

This could be called Quick Response Skills.

In this way, it should always be possible to find skills in common, skills that could be transferred.

In the same way we studied the Portuguese and Japanese languages in Your Mother Tongue Is Helping Me (Pinheiro, 2016), we want to study chess here: We are after skills that every successful chess player must have.

We will use pictures and other pieces of evidence to prove our points.
This paper would be under the umbrella Teaching for Freedom, since if we teach targeting skills, we give our students more options in life, therefore more freedom.
The method that most aligns itself with this thinking so far is the Multilevel Method (Pinheiro, 2017). An editorial review brought the idea that it could be applied in TESOL. Indeed, it can be applied in several disciplines.
It is a method that could be told to be a Learning Accelerator as well, and this is another project we work on. The Multilevel Method will accelerate learning in other disciplines because education that targets skills will always do that: You learn the skill once and you can use it for life.
It is just like when we learn a language: We are always increasing the degree of depth of our learning, and we have to always keep up with the pace of evolution. If the foundations are there, we can actually self-teach after we learn the skill, after we can say we have added it to our set of skills, even if that addition came with the tag basic user. We can then progress on our own and reach the super advanced level, let's say, because we started having those foundations in our personal contents folder.

Development

We start by thinking of the basics of the game of chess: board, pieces, and clock.
We need to get acquainted with each one of those parts of the game, so that we must learn the allowances of each, and every, piece of the game, for instance.
What distinguishes one piece from another is the appearance, so that we must have good analysis and observational skills, first of all: What are the characteristics that can tell me that a piece is a bishop, what are the characteristics that can tell me that the piece belongs to me in that match, etc.
A bishop will usually have, considering the cheap and basic chess set, a big sphere on its top and a body that progressively enlarges if we observe it from top to bottom.

(ClipartPanda.com, 2014)

Now, we need to learn the functionality of this piece: what can the bishop actually do, how does it move, etc.
A bishop will always run in diagonal moves and inside of the colour where it is seen in the beginning of the game, so that it cannot come from a black square and end up in a white one, for instance, as it moves.

To move the piece diagonally, we must know what a diagonal is and we must have the coordination to carry the piece exclusively over it.

We then need motor coordination and familiarity with some geometric concepts from Mathematics.

Motor coordination is a skill that is ample enough in terms of application. We should be able to get rid of the sigmatoid Mathematics when we describe the second skill we have mentioned.

In a sense, everything on earth seems to have to do with geometry: A desk is on our way. We need to measure its dimensions with our senses somehow to then calculate our body moves and not hit the desk as we walk.

This is the so called spatial orientation.

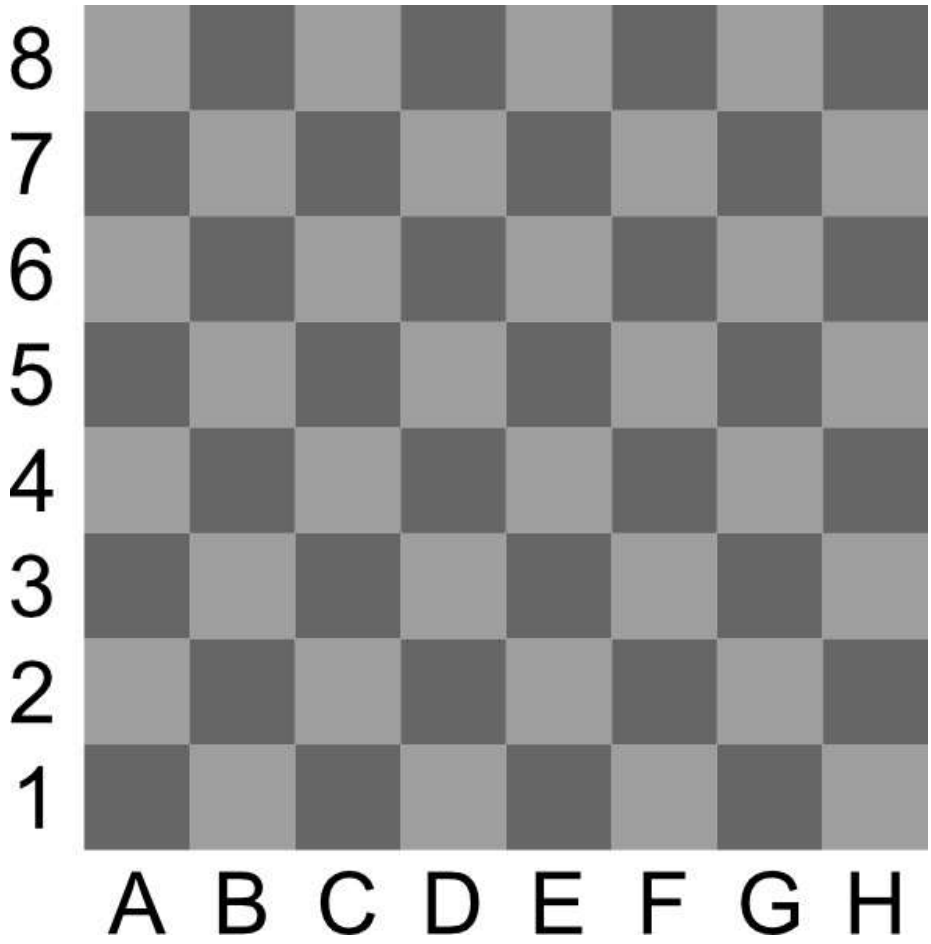
The ability to go on a straight line from one vertex to another of a rectangle as we walk is spatial orientation, but knowing what a diagonal and a square are is Semantics, so that capability of retrieving and adequately using semantic knowledge could also be one of our skills here.

Now there is the importance of the piece in the game. A bishop is worth three points, a pawn is worth one, and a queen is worth ten. Based on that, we need to be able to compare one piece with another and work out which one is more valuable, and therefore which one should be protected in a stronger way.

That involves comparative reasoning. It also involves numerical ability and associative skills.

If we look at the chess board, we will usually see numbers and letters: Numbers to one edge and letters to another.

For each square we choose, there will be a number to one of those edges and a letter to the other.



With this, the chess champion has to have the same skills we see in the mathematicians when they are working on the Cartesian Plane. Those are spatial orientation, associative skills, and projective skills, to mention a few.

The player has to be able to identify pieces, put them in the right starting spot, and wait for the adversary to do the same.

They will need a good memory to do that. They will also need patience.

After the game starts, they must use the clock. That demands coordination of hands with mind.

Then there is the logical reasoning with memory: best moves, past matches, power of predicting moves of the adversary, etc.

So far, we have identified the following skills: logical reasoning, memory, coordination of hands with mind, patience, spatial orientation, associative skills, projective skills, numerical ability, comparative reasoning, motor coordination, capability of retrieving and adequately using semantic knowledge, quick response skills, observational skills, abstract reasoning, and synthesis abilities. Yet, it is possible that plenty of other skills are also being developed or applied as we play chess in the way the champions do: Concentration skills, for instance.

The chess champion would also have to be able to follow rules extremely well, since if they fail there, they lose the game. Besides, they would have to be able to follow procedures, since there are plenty to be followed. In this case, they would have to have compliance skills, but also good reading skills, good interpreting skills, etc.

The chess champion also needs to have rhythm, since otherwise they cannot make it in time. Keeping the pace during the entire game is the target, but sometimes they will have to think a bit longer before moving the piece, especially when the adversary is good.

The chess champion would have to be able to remain alert regardless of how tedious things may become, so that they would have to have endurance skills.

We then add the following skills to our list: compliance skills, reading skills, interpreting skills, pace keeping skills, and endurance skills.

Conclusion

Some skills a chess champion must have seem to belong to the World of Mathematics, but, when we are working inside of Teach for Freedom, we search for the most encompassing designator we can find, so that we change sigmatoids that belong exclusively to Mathematics, so say geometry, into sigmatoids that are applied everywhere, so say spatial orientation.

The skills we isolated in this paper are numerous, but even more can be isolated, so that the study on skills seems to be very laborious and worth it. See: logical reasoning, memory, coordination of hands with mind, patience, spatial orientation, associative skills, projective skills, numerical ability, comparative reasoning, motor coordination, capability of retrieving and adequately using semantic knowledge, quick response skills, observational skills, abstract reasoning, synthesis abilities, concentration skills, compliance skills, reading skills, interpreting skills, pace keeping skills, and endurance skills.

We could be performing elaborated studies now, so say psychometric exams to prove that the better the chess player does, the higher their score is in each one of the mentioned skills.

We could also be identifying individuals who do not have one of those skills and proving their incapacity to win in chess. We could be teaching them those skills and prove the change in capacity, and so on.

All this leads us to the same style of work we see in Multilevel Method (Pinheiro, 2017): We work a lot outside of the classroom, since we have to worry about moulding the student in such a way that those skills will appear or will be further developed, and we experience peace during class hours, since they are all busy, completely focused on acquiring those skills themselves.

What changes now? What is the big change? Now we would be interested in measuring those skills, not necessarily the contents, but the skills themselves. One thing is owning the information, so say who discovered Brazil, and that was Pedro Alvares Cabral. Another thing is owning the logic involved in discoveries of that type, the skills that are necessary to locate that piece of land, to repeat the experience perhaps with even more success. Owning this sort of skills will help us understand how James Cook discovered Australia, and that is slightly different from simply knowing names and facts. Besides, owning these skills may lead to us discovering a new place in the future, so that we are becoming more and more active each time we learn a skill instead of simply the contents.

Perhaps we want to reach the stage where the information itself is worth 20% of the marks, since the information is specific to the location of the learning, say Brazil, and we then got Pedro discovering it, but the skills are perfectly transferable and are only attached to the intents or processes involved.

A world where the school teaches skills, not only contents, is a world where we start distancing ourselves from the doom prescribed by the sociologist C. Ceccon (Ceccon et al, 1991).

It is a world where the so famous song, Another Brick in the Wall, by Pink Floyd, starts looking like an abstraction, something completely different from reality.

Most of the time, what is missing for people to start liking attending school is utility of what they learn in their own lives. This is certainly the only way we can finish with the gap between what we learn and what we use.

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