LifeKinetik® Parallelball instead of cramming for a test at midnight?

Getting better school results with LifeKinetik®

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„…that's something for us, we should try that in any case" (Klopp, J., 2009). That's how the later master coach resumed the Horst Lutz' attendance at the training of football club Borussia Dortmund. Horst Lutz visited the football club and gave an introduction of the method "LifeKinetik®". Those who manage to implement these exercises can increase their performance in other fields, too. That was the common conclusion of the people involved at the end of the first workshop unit. According to Lutz, this exercise program does not only help professional sportsmen, but particularly in your everyday life at work or school.

Moving instead of cramming?

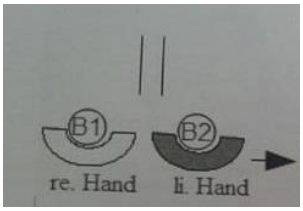
Is it possible to improve school grades, reading and spelling disabilities (for example dyslexia), the attentiveness or the concentration of children at school with the help of "Richtungsgehen" (going towards a certain direction), "parallel ball", "Drehballtanz" (dancing with a turning ball) and "Schlägerkombi" (moving badminton rackets in different directions while doing other movements) – all of them are exercise of the LifeKinetik® training program.

How does it work: making movement exercises and their variations instead of hitting the books? If you ask Horst Lutz, the inventor of LifeKinetik®, this question he will answer "yes". He will add, that LifeKinetik® does not mean to stop learning – people are still learning, but in a much more efficient way. Lutz' statement is confirmed by the pupils of the first LifeKinetik® course at the Johanna-Wittum-Schule Pforzheim. This school has been offering LifeKinetik® as an optional subject since September 2010.

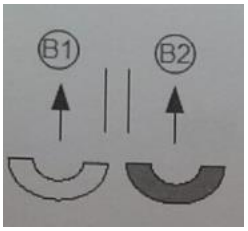
Scientific proofs

Several scientific studies tested the skills of people who had completed a LifeKinetik® training before. They confirmed the following significant improvements (Lutz, 2011):

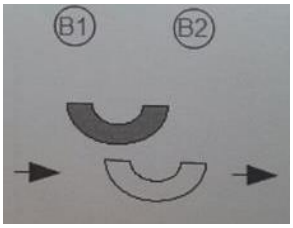
- equilibrium
- hand-eye-coordination
- errors reduction
- dyslexia
- increasing attentiveness
- using mathematical skills and knowledge in a complex context
- combining operations in processes
- quality of making decisions
- cognitive and motoric performance



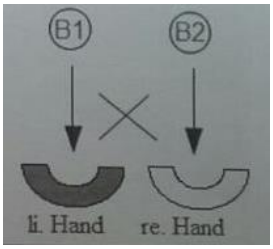
1) Right hand and left hand, both hands are parallel and a ball in each hand



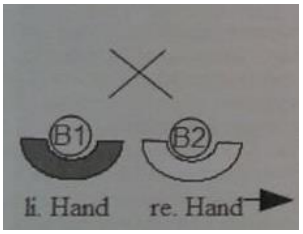
2) Throw both balls up in the air at the same time.



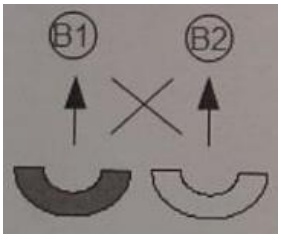
3) Cross your hands



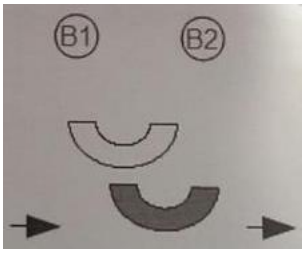
4) Catch the balls with your crossed hands.



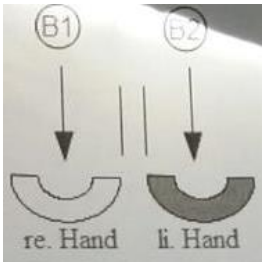
5) Hands are crossed



6) Throw both balls up in the air again, at the same time.



7) Cross back your hands (left hand again on the left, right hand again on the right)



8) Hands are parallel, catch the balls again.

Figure 1: Parallelball (parallel ball); legend: B1 = ball no.1, B2 = ball no.2, II= hands are parallel, x = hands are crossed

Basics of LifeKinetik®

It doesn't matter which exercise the pupils are confronted with – the variations of exercises is almost infinite – the pupils always show a very high level of attention and concentration, together with a lot of joy and fun. As an example this article would like to introduce one exercise: the so-called "Parallelball-Übung" (so-called parallel ball exercise) – see figure 1. It's a classic among the various exercises of LifeKinetik®: You throw up two balls in the air, both are parallel, then the hands cross and you try to catch the balls again (with crossed hands). In a third step, you throw up the balls again and cross back your hands to the starting position, try to catch the balls at the end. What is the intention of this exercise? According to Horst Lutz the exercise aims at letting the two hemispheres of our brain work across, although the visual perception detects that hands are working in parallel. (Lutz, Horst 2010). This is an exercise that children and teenagers at school are doing with enthusiasm. You can find a video showing the same exercise with juggling veils at Youtube: http://www.youtube.com/watch?v=RD1_RJZxVDo&NR=1&feacture=endscreen.

LifeKinetik® manages to reach and activate the different brain areas and stimulates the neuronal and synaptic plasticity. Thereby the training is based upon the fact that a movement does not work without the brain and vice versa.

LifeKinetik® refers to a different learning approach and uses a basic principle: "Vary the exercise before automation." That is to avoid a one-sided facilitation effect. Essential for the positive effect is not being perfect. It is not important to do the exercise in a perfect way, but the time span of doing the exercise (and its variations).

The training program does not depend on age. It has a strong social orientation. Everybody profits by this exercise and the positive effects of the training – child, teenager, adult or senior, people working, pupil or sportsman. The training takes place once a week for one hour. Additional training is not necessary, the brain catches up. The physical efforts are rated as low, that's why also untrained (unfit) person can participate actively.

Positive effects can already appear after a couple of weeks. But these results are achieved as well if you do a less intensive training each day (lower extend, just 5-10 minutes).

The joy of movement is very high during the LifeKinetik® trainings. This is because the exercises seem to be very harmless or even funny at the beginning. Move a juggling veil in a circle and throw a ball up in the air at the same time, dribble the ball. Or you jump according to a given "jumping" structure: left – right – both feet – right – left – both feet (see figure 2). You jump across the line und count to 20 or you speak out your address loudly:

Figure 2: Jumping pattern: left – right – both feet

Some of these exercises raise doubts about their practicability. If the participant manages to do the exercise – against his/her own belief – it can, according to Frieder Beck (TU Munich), cause a release of dopamine in the brain which, in turn, supports neuronal plasticity. (Beck and Beckmann, 2009).

LifeKinetik® and executive functions

The modern brain research maps the functionality of the human brain step by step. Die learning process is better and better explainable. According to MD Sabine Kubesch the executive brain functions (working memory, inhibition and cognitive flexibility) have a strong impact on the school performance (Kubesch, Walk 2009).

"Executive functions enable specific activities: making decisions, a tactic and well-structured course of actions or proceedings, which is flexible and target-oriented at the same time, furthermore the reflection of your own acting and behavior, correcting it if necessary. (Kubesch, Spitzer 2010). According to Adele Diamonds research findings (2007) these executive functions are verifiably trainable. These functions benefit from physical as well as from cognitive training. (Diamonds et al. 2007).

LifeKinetik® combines physical movements and cognitive tasks to this effect. Two main aims in doing so are on the one hand an optimization of the working memory and on the other hand a higher cognitive flexibility.

LifeKinetik® at school

The secondary modern school in Leopoldsdorf i.M. (Austria) is school where children with reading and writing disabilities are being taught. Their reading and writing skills were very low. The school decided to do a special kind of LifeKinetik® training: Every day the children had been doing LifeKinetik® exercises for about 5-10 minutes.

Researchers measured the results by using standardized reading and spelling tests: "Nadine. She suffered from a strong reading weakness, she made so many mistakes – the meaning of the written text was not understandable anymore for her listeners. The sports teacher (trained in LifeKinetik®) spoke to the German teacher and they decided to do a little experiment: Nadine has been doing the LifeKinetik® coordination exercises for three weeks every day. The result is sensational: In this short time Nadine's reading skills have improved significantly. She reads fluently, makes hardly mistakes and has developed a much better understanding of texts. (www.gesundheitstrends.de, 2012).

LifeKinetik® can be integrated into the physical education lessons easily. It can be part of the warming-up or technical part, there are always opportunities to combine simple movement patterns or sport type specific exercises with each other and train them while working on cognitive tasks at the same time.

As an example: “Tauschball” (Swapping ball): Each person dribbles with a basket ball and has a swapping ball in his/her hand. This can be a tennis ball or juggling ball. If two persons meet they exchange the tennis balls while dribbling, by handing them over or throwing them. Every participant has to count the number of exchanges during this exercise. The teacher (trainer) gives a signal from time to time (by using a whistle). If the number of exchanges is even, you go on dribbling the basketball with your left hand. If the number of exchanges is odd-numbered you continue the dribbling with our right hand. This exercise is a lot easier if you use a juggling veil (entangled in a knot) instead of a tennis ball.

Variation 1:
You can include a variation in how to hand over the ball. If the number is even you hand over the ball with a pass on the ground. If the number is odd you hand over the ball by throwing it to the partner.

Variation 2:
You can include a turn: If the ball is handed over to you by a pass on the ground you have to turn 90 ° and then continue dribbling. If your partner is throwing the ball the task is to turn 180° and then continue dribbling.

Variation 3 (see figure 3):
You can use different kinds of balls: Instead of tennis balls you can use gymnastics balls with different colors: red, green, blue, yellow). They are used as swapping balls. For every color another handing over/exchange and dribbling variation is used, for example: Red color = pass on the ground, change of the dribbling hand; blue ball = normal pass without change of the dribbling hand; green ball = pass on the ground without changing the dribbling hand; yellow ball = the swapping ball is bowled and you change the dribbling hand.

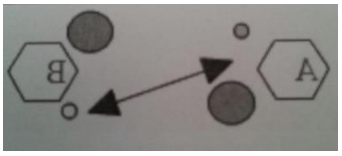


Figure 3: Swapping ball according to variation 3