



fig. 1

The first type of movement for children, the crawling, stresses the whole organism, especially the back muscles. The little ones enjoy to move under the low screwed bars upstart forward (in face-down position, fig. 1) or backwards. Facing backwards (supine position) forwards and backwards the intensity can be increased. These practises can be used for little competitions as well.

fig. 3



If you unscrew the steps out of the narrow sides, the kids can crawl through the gaps (fig. 2) as well as alongside through the apparatus. Thereby coordinative abilities are being established. Cognitively encouraged is the orientation in space, which not every child has in the beginning.



fig. 2

The crawling on the wide base on the straight and the lopsided level works very well (fig. 3). But due to sensory-kinetic problems some children still have balance issues with the narrow balance beams, even with low height differences.



fig. 4

These exercises for the body particularly strengthen the arm- and back muscles and establish the development of a good power-to-weight ratio while the children are pulling their own weight. First the youngsters practise on the lopsided bench while they are pulling their bodies up and forward on the board or backwards on the balance beam. Already on a plane surface more strength is needed, but starting with forward stretched arms (fig. 4) the weight needs to be pulled only to the bended arms (fig. 5).

fig. 6



The practises need to be repeated before the children can move their body forward for a whole arm length.



fig. 5

If you pull the weight up the lopsided level, the intensity greatly increases (fig. 6).

Similar effects can result by pushing. Therefore the kids move in straddle position backwards on the lopsided and even balance beam or up started forward on the even respectively lopsided board.



fig. 7

On even ground young children walk on a broad area in upright posture surefooted and well balanced. Facing little obstacles like the steps of a ladder, some children still indicated the use of their arms to secure their balance. (fig. 7)

fig. 9



They already walk safely on the lopsided level. Although the board is connected to the second step from top and only a small step has to be overcome to the higher level, some younger children still use their hands as a help. (fig. 8) Obviously coping with unknown problems wasn't practised enough yet.



fig. 8

The ability of holding the balance can be practiced with many variants of the apparatus. When walking on the balance beam the arms are used as a safety, and also at the step-like changeover on the lopsided level downwards. (fig. 9)



fig. 10

All children have a well developed requirement for exercise. So it is attractive for them to prove their balance ability again and again. Without any requests they balance on the ladder, which is lying flat on the bottom, from step to step. (fig. 10)

fig. 12



Soon they even try it on the wider cross beams. Walking the steps upwards on the lopsided ladder is difficult but already the youngsters deal with it quite well. (fig. 11)

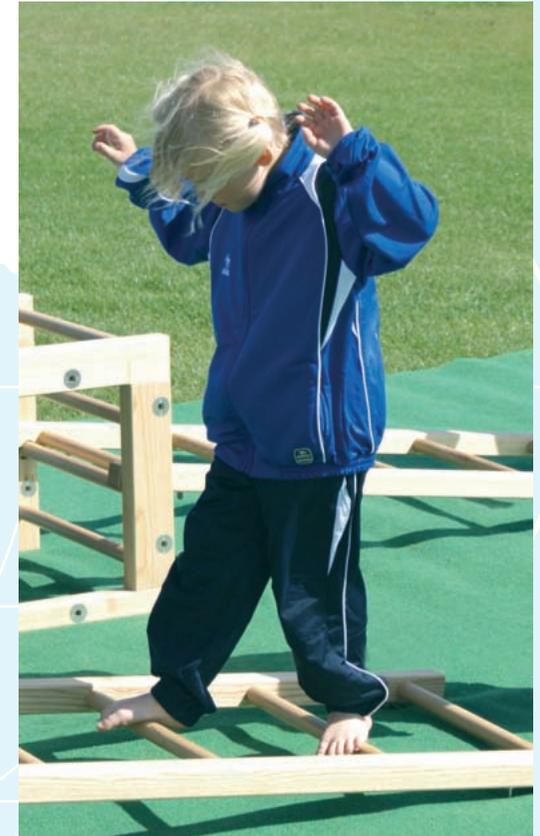


fig. 11

Also balancing down the steps doesn't cause any difficulties, when the arms are used to hold the balance. (fig. 12)



fig. 13

On a wide, lopsided bench and raised straight as well as on the balance beam the children walk with a hand set (ball) without any difficulties. Youngsters even secure their balance on the balance beam with their arms, when they carry a ball in their hands. (fig. 13)

fig. 15



It shows well developed balance abilities if the children perform the basic jump holding the ball in their hands. (fig. 14)

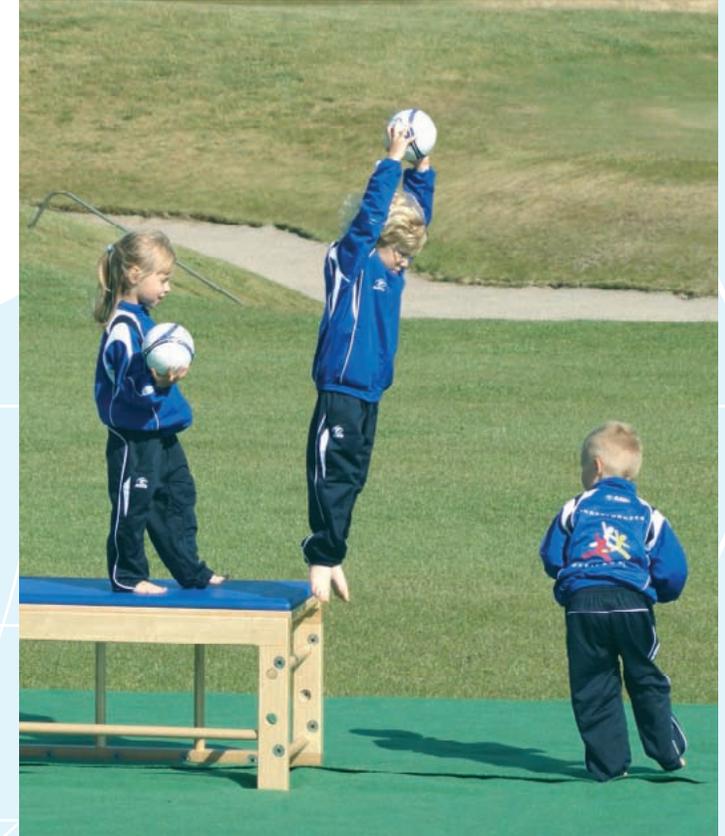


fig. 14

To roll the ball up the lopsided board and on the raised straight requires coordinative-kinetic skills and cognitive concentration, but is dealt with well. (fig. 15) Usually youngsters have more problems balancing the ball down the lopsided board.



fig. 16

The crouch walk upstart forward develops the kinetic coordination and cognitively the concentration ability. On the lopsided board and the raised straight the youngsters manage the exercises as well. On the narrow balance beam even the older kids support themselves at the edges. (fig. 16)

fig. 18



The stretch walk upstart backwards over the diagonal ladder is coped with quite quickly by all kids. (fig. 17)



fig. 17

But that isn't always the case with the back facing forward. While this girl handles the exercise very well (fig. 18) others have their problems with it. Often they don't stretch the arms. As a result the body snaps in the hip and an unmeant crouch walk occurs.



fig. 19

The basic apparatus works well to practise coordinative abilities. Every child attempts climbing up the steps and through the gaps in their own way. Often the arms are used to stabilize the balance and the body is bended down. (fig. 19)

fig. 21



Even when they step over the basic apparatus onto the lopsided ladder at least one arm is used to stabilize the balance. (fig. 20)



fig. 20

It's harder to climb over a bigger object (medicine ball) on a raised level, to cognitively estimate the correct height and to hold the balance. (fig. 21) This girl performs the exercise very well.



fig. 22

To practise coordinative-kinetic abilities, especially the balance, another variant is suitable: Between the vertical built basic apparatus a ladder is to be attached in about 50 cm height. When younger kids climb through the steps, they are holding themselves tightly on the ladder. (fig. 22)

fig. 24



The older girl moves herself cleverly from one gap between the steps to another. Thereby she stabilizes her balance with her arms; a harmonic-aesthetic movement of the whole body. (fig. 23)



fig. 23

With a lot of fun the youngsters overcome the beams that are screwed into the basic apparatus. Also they hold themselves tightly because they can't put their bodyweight from one leg to the other without this stabilization. (fig. 24). They can only succeed with extensive practise.



fig. 25

The upright positioned and secured basic apparatus allow climbing in many different ways. Coordinative-kinetic abilities are being developed very well while climbing through the gaps of the steps. (fig. 25)



fig. 27

A bit of courage is needed to climb up to the highest steps, to get over them (fig. 26) and to get down to the bottom on the other side again.



fig. 26

Climbing up the bar is hard for many children because it has never been practised correctly with them. Methodically the children climb up the steps at first, grab the bar with both hands and bended arms and with the feet. For this they set one foot with the bowing form the front on the bar with bended knees, the other one is pushed with the instep from the back against the bar tightly, then they let themselves down very slowly. This can also be practised when the caring person holds the lower bar with both hands and the child can put its feet on the hands in the described way. If this climbing technique is being mastered well, the only thing missing to climb up the bar is the strength of the arms. (fig. 27)



fig. 28

fig. 30



Children have a big demand for plenty exercise, like running, every day. By doing so they strengthen their whole organism and develop coordinative-kinetic abilities and skills. Cognitively they are able to orientate in their environment very quickly. Sometimes the youngsters move their arms in an uncontrolled way while running. Quick changes of directions often look odd.

The kids gym apparatus is being used for practicing many running variants as well: The setup shows one board leading up to the run of the basic apparatus with the lid on and the other board sloping down to the outlet. The difficulty can be increased when the balanced beam is being attached between the two basic apparatus. Five year olds already use their hands and arms properly while running. (fig. 28)

Although higher above the ground little steps are being dealt with very well even with a narrower base. (fig. 29)



fig. 29

The kids already run safely on the balance beam. (fig. 30)



fig. 31

This body movement strengthens the whole organism; it particularly develops the jumping power, supports coordinative abilities and skills, contributes to the orientation in space and sometimes even requires some courage. Jumping can be practised with the help of the kids gym apparatus in many ways. Closed jumps on a higher level require that the kids exactly estimate the width of the area. Even before jumping over the distance of 40 cm some five year olds hesitate. (fig. 31)

fig. 33



If swinging the arms doesn't create enough momentum for the flight phase the body can hardly reach the target for landing safely. (fig. 32) In this case closed jumps should be practised more intensively over little barriers on the ground.



fig. 32

For high-straight (stretching) jumps the narrow- and wide sides of the basic apparatus are suitable. Especially the later because several children can practise at the same time. It is important to hold up the arms and to keep the body straight. (fig. 33)



fig. 34

fig. 36



Assisted jumps strengthen the whole organism of the child, especially the arm- and back muscles, develop kinetic-coordinative abilities and help to get a good orientation in space.

Knee assisted jumps can be practised in different varieties in a combination of running and jumping by using the kids gym apparatus. You run over the board that is hooked to the narrow side of the apparatus, support your body with both arms onto the lid and land in a kneeling position. (fig. 34) The intensity of this exercise can be raised by hooking the board onto deeper steps and eventually the kids can jump into the kneeling position without any help. For this the horizontal set-up is useful, because several children can practise at the same time.

In preparation for the crouching jumps the assisted jumps are being practised with a quarter turn over the net. For this an unscrewed step is lying orthogonal behind the net. The children rest on their stretched arms behind the step and jump with a quarter turn over the net. Hereby they like to stretch - as if trying a handstand - their legs. (fig. 35) But the legs need to remain bended, so they can land in a crouch position.



fig. 35

Boys as well as girls are able to shortly support their body with the arms and lift off from the ground. (fig 36) This skill makes them happy and they are proud of their achievement.



fig. 37

By using the crouching jump several apparatus alternatives can be cleared. This exercise can be practised very well. First the children stand next to the board, which is lying on the ground. Then they rest their hands on the board and keep their arms stretched, knees bended and feet together. Then they jump to the middle of the board and back again to the same side. After that the children practise jumping from the other side, after that they alternate sides while jumping, that means to jump up on the board from the right and to hop down to the left, while remaining sideways in the crouch position. After that the crouch jump can usually be done over the whole width of the board. (fig. 37)

fig. 39



The crouch jump can also be practised over the flat lid of the horizontal construction of the basic apparatus. (fig. 38) Thereby the movement series offers a lot of different alternations by climbing up on top, assisted walk backwards down from one side and then pulling oneself up, as well as doing a stretched crouch jump on the other side.



fig. 38

This movement task can be made even more difficult by using a higher level, the balance beam. First the children practise to jump up and down on one side, then, similar to the practises with the board, they jump down on the other side. Those who manage these exercises well can practise to get over the beam with the crouch jump. But for most kids it's usually difficult to jump up and touch down with both feet together. (fig. 39)



fig. 40

The kinds of movements to practise the crouching jump that were already shown are expandable. After the children are able to manage a higher and relatively small obstacle, the balance beam, even more coordinative-kinetic abilities can be acquired. For this the conditions are being changed by using a raised and wider apparatus: Between the vertical basic apparatus the lid is attached so that it will slope down. The middle of the lid should be about the height of the children's hips. Now the kids rest their hands on the upper part, jump up on the one side and down on the other side of the lid, after that they can try to clear the whole width at once. (fig. 40) This way it is easier to overcome the wide equipment.

fig. 42



To crouch over an even lid is a bit more difficult because the jumping power needs to be increased and the centre of gravity has to be shifted. (fig. 41) Those children who can't manage that right away should practise the jump up and down again.



fig. 41

Even more jumping power and coordination is needed for the crouching jump over the slope with resting the hands on the lower part of the apparatus. (fig. 42) Five year olds often manage this very well. But it's always difficult to keep the feet together while doing the crouching jump.



fig. 43

These exercises strengthen the whole organism, strengthen jumping- and speed power, develop balance and reaction abilities and support the orientation and courage. Thereby especially coordinative-kinetic skills and abilities are trained. Running and jumping usually are some of the first movement combinations that children learn. Four year olds can already use them very well. The older you get, the better you connect running and jumping with each other. The kids gym apparatus offers a lot of options for practising. One example is using the net between the flat basic apparatus, where several children can jump at the same time using a short start-up. (fig. 43) To practice high- or long jump you can place obstacles like balls or mattresses in front of or behind the net.



fig. 45

If the apparatus has just been used in the upright construction, the net is being tightened in between. The children quickly jump over the barrier in two squads one after another. (fig. 44) These exercises bring a lot of joy for the kids. They can also be used for small competitions.



fig. 44

Even five year olds support their jumping power with upheld arms. (fig. 45) Rapid practise episodes, this means several repeated movements, don't just help to intensify the physiological effects on the organism but also to establish a routine and to develop kinetic abilities.



fig. 46

For practising the movement combination running and jumping on a higher level the flat apparatus can be used. The step height to jump on the horizontally constructed apparatus can be varied. At first you attach the board used for the start-up and take-off to the second step from above, then to the third step and finally you can leave it off all together. For high- and long jumps there should be a gap of about 30 cm between the apparatus to jump over it. (fig. 46)



fig. 48

After the children cleared this distance the gap can be extended to 50 cm and that increases the difficulty. In order to jump over this larger gap the children are running faster and jumping off more powerfully. In doing so the kids stretch their jump off leg and the whole body is pushed upwards. (fig. 47)



fig. 47

During the flying phase the balance is stabilized with the arms and the body is prepared for the landing. Even five year olds manage this exercise very well. (fig. 48)

For the running and jumping combination the apparatus can be put sideways. The children then have to estimate the distance carefully in order to land in the middle of the 60 cm wide boxes. With this set-up eight to ten children can practise at the same time. This doesn't only establish a routine but the physiological effects on the organism are also being intensified.



fig. 49
fig. 51



With these physical exercises the centrifugal force is being developed, the ability for balance is being assisted and it contributes the orientation in space. The rolling is very popular. Even infants try it around the longitudinal axis successfully. Four year olds already try to roll themselves forward around the diagonal axis. Methodically the forward rolling is being practised downwards on the lopsided level. The bordered lane of the kids gym apparatus proves to be helpful for this. It forces the children to roll straight (fig. 49) and not to tip over their shoulders.

It's harder to practise the rolling on a flat surface. First you start in the crouch stand and roll into the stretching seat. The legs are only bended slightly while rolling. (fig. 50) Hereby a quick and peppy legwork is important. If it is missing, the children land on the back.



fig. 50

Before rolling the chin has to be pushed against the chest. In the beginning the kids choose an easier movement and touch down with the cortex. (fig. 51) That must be corrected immediately because the spinal column can be clinched.

As an alternative to the stretching seat the children roll out of the straddle stand into the straddle seat. The difficulty increases when rolling from the crouch stand into the crouch stand. It is even harder to roll out of the stand back into the stand. Only a few of the six year olds are able to manage that. Also most children of this age aren't able to cope with the backwards roll.



fig. 52

fig. 54



The motion sequences at the so called “Felgabzug” (rolling forward around a beam) are quite similar to the forward roll, as are the effects on the organism of course. First the children jump out of the stand into the pushed up position. The horizontal bar should be mounted as high as the children’s chest. Thereby it is still hard for four year old children to support their weight with stretched arms. (fig. 52)

At first children aren’t able to handle that kind of movement, but they learn it soon. Most important for this whole exercise is the grip around the bar. Before rolling around the beam the rotational speed that is needed, has to be built up by swinging the legs forwards and backwards. The body has to be bended slightly (fig. 53) and the chin should be pressed on the chest.



fig. 53

Happily and safely landed, not in a crouch - but in a lying way for now. (fig. 54) As it is the case with many physical exercises, this one brings a lot of joy to the children and motivates to repeat it. So again coordinative-kinetic skills are being established and can develop into abilities.

The difficulty can be increased by jumping into the stand (onto the horizontal bar) with a start-up and using the momentum to roll around the beam immediately. Then the “Felgabzug” becomes a “Felgabschwung”, (swinging around the beam).



fig. 55
fig. 57



The swinging at the horizontal bar requires jumping- and swinging power. The kids can make use of the stretching jump with a start-up to get hold of the horizontal bar. That makes it a lot easier to start the swinging. The grip is loosened when the body reaches the highest point while swinging backwards. It is more difficult to start swinging if the children grab the apparatus without any start-up. After that the children have to strike out their legs to make their bodies swing. This is a lot harder when the legs are not kept together. (fig. 55)

You can increase the amplitude by putting a goal for the jumping-off forward, whose distance can be enlarged in steps. That way you motivate the children to use more power and to swing higher. (fig. 56)



fig. 56

While swinging the grip has to be loosened before the body reaches the highest point. That way the kids can land safely into the hoop. (fig. 57) The shining eyes of the children show their happiness that they have handled even this difficult exercise.



fig. 58

You can use the uneven bars, here with a big distance between the bars, very well for climbing, hanging, swinging or brachiating. With those exercises the whole body is stressed, the jumping- and swinging power improve and at the same time the balance and the orientation in space are trained. After jumping into the stretching position on the rear and higher bar the body is brought up and forward with a powerful backward movement of the legs. They are then swung over lower bar. (fig. 58) Hereby the grip has to be loosened before the body got to its highest point.

fig. 60



While swinging up- and forwards the arms are slightly bended, this way the kids have more power for pushing themselves over the bar. (fig. 59)



fig. 59

If too little power is used, the momentum isn't enough to swing the body over the bar. Then the children sit onto the bar (fig. 60), but that doesn't have the same coordinative-kinetic effect.



fig. 61

fig. 63



As many others of the mentioned exercises do the brachiating strengthens the whole organism, but especially the arm-, leg- and trunk muscles. Some forms, like the diagonally beams between two apparatus, require courage and are good for practicing the orientation in space. Most young children are already able to pull their bodies up to the chest high beam and grab it with their legs. It often can't be done at an apparatus that is much higher. As a methodically help you let children grab the beam with both hands, climb up the steps with their feet (fig. 61) and than cross both legs over the beam.

It is important to bring the body close to the beam with bended arms and an upheld head. (fig. 62)



fig. 62

If the arms are kept straight and the legs only touch the beam with the ankle the children struggle to hold their own body weight and they come down to the bottom too early. The brachiating at the diagonal beam should be tried backwards and forwards. Furthermore the kids can practise brachiating at a higher beam in a stretching way.

If a ladder is being attached at this height instead of beams, the brachiating becomes more difficult. The children must brachiate at the more than shoulder wide beams with the body stretched (fig. 63) by swinging the hip and legs. This exercise can be done for- or backwards. This requires a lot of power for holding the body weight and to create the momentum for the locomotion.



fig. 64

fig. 66



Practises for throwing strengthen the musculature of the trunk and the arm. Cognitively they help to estimate the throwing height and distance. The combination of running and throwing helps to develop springiness. Several variants of the apparatus can be used for the throwing, for example beams and the net in different heights. Depending on the size and the weight of the ball special kinds of throwing techniques are preferred. With a small ball even very small children succeed in throwing the ball with one hand, although that looks still clumsy. With bigger gymnastic balls four year olds practise the so called "Schockwurf" (to push the ball away from your body) at first, later using one or both hands they try to throw the ball ("Schlagwurf"), at first out of the stand and then in step position. Five year olds can combine both techniques with walking and then running. (fig. 64)

The combination of throwing and catching can be practised with a partner over the beam or the net. The height can be altered between the head and the hip. Four year olds catch the ball with stretched out arms after a direct pass. Five year olds succeed to catch the approaching ball with only little deviation with physical play. After practising a number of times they move more quickly and manage it with bigger deviations as well. So they run in the direction they threw the ball and try to catch it. (fig. 65)



fig. 65

To throw with one hand should be practised with the left and with the right arm. It doesn't matter if out of the stand, the walking or running. This doesn't only help to strengthen the musculature but also to develop the ganglia on both sides. The combination of running and throwing can be used for squad competitions very well. (fig. 66)



fig. 67
fig. 69



The two rings/baskets can be used as a ring for aiming or for a game of basketball. For aiming they are attached vertically to the steps above the upright basic apparatus. You throw out of the stand, out of the walk (fig. 67) or out of the run.

Compared to this throwing into the horizontally attached basket is more difficult. The children have to estimate the height and also the distance of their thrown ball (the flight path). Not everyone can handle that immediately. Although throwing with one hand is encouraged, some kids rather choose to throw with both hands. (fig. 68)



fig. 68

It's favourable to give the children a help for orientation, by marking the throw off, respectively the jumping-off point with a line or an apparatus like a hoop. Some five year olds are able to perform the combination of running and jumping. But the crossed combination is still missing, that means the kids can not yet use the right arm and the left standing leg respectively stemming leg at the same time.(fig. 69)