

The ROOT SKILLS OF LEARNING

A Window into the Learning Mind

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Play

- an absorbing, apparently purposeless, self-motivating activity that provides enjoyment and suspension of self-consciousness and sense of time.

Play creates the opportunity to learn what Daniel Goleman calls emotional intelligence- **the ability to perceive others' emotional state, and to adopt an appropriate response.**

The brain wires itself up through play.

Play creates new neural connections and test them.

When play is denied over the long term, mood darkens, sense of optimism is lost and we become incapable of feeling sustained pleasure. **With enough play, the brain works better; feels more optimistic and more creative.**

Attunement is the most basic state of play; providing the infant bonding critical for emotional self-regulation; it is essential for developing later emotional regulating activities, risk-taking decisions, and social judgements **Attunement buffers the growing infant and child from excessive surges of emotions.**

Play is the foundation of what we do for the rest of our lives.

Through **movement play** we learn to think in motion; movement structures our knowledge of the world, space, time, relationship to others. **Object play** with our hands creates a brain better suited for understanding and solving problems; as our skills in manipulating objects develop, the richer the circuits in our brain become

Stuart Brown, M.D. and Christopher Vaughan. Play How It Shapes the Brain, Opens the Imagination and Invigorates the Soul. New York: Penguin Group. 2009.

Head -Toes -Knees –Shoulders Game

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Self-regulation, or the ability to control behavior, was measured with the Head-Toes-Knees-Shoulders task, a structured observation requiring preschool or kindergarten children to perform the opposite of a response to four different oral commands in a five minute span of time. Children were instructed to touch their toes if told to touch their head, and vice versa. Students who performed well on this behavior task in the fall achieved strong scores in reading, vocabulary and math in the spring, compared to students who had low performance on the task.

[p://www.sciencedaily.com/releases/2009/06/090608162547.htm](http://www.sciencedaily.com/releases/2009/06/090608162547.htm)Read
http://educationalissues.suite101.com/article.cfm/game_predicts_kindergarten_achievement#ixzz0SRJpzwNt

CEREBRAL CORTEX

MIDBRAIN

BRAIN STEM

Survival

- Aggressive: physical and verbal
- Cannot sit still
- Clothes-sucking and shirt turning
- Constantly going to the bathroom
- Easily distracted
- Hyperactive
- Pencil chewing
- Speech difficulties
- Tears
- Arms disappear in clothing
- Itchy eyes
- Off task
- Does not finish work
- Everything is boring
- Knee-sitters and chair rockers
- Perfectionist
- Stressful reading
- Trouble with boundaries

REFLEXES

Moro Reflex

Fear Paralysis

Asymmetrical Tonic Neck Reflex

Spinal Galant Reflex

Symmetric Tonic Neck Reflex

If reflex immaturities persist, the children are at risk of experiencing a range of learning and behavior difficulties at various stages of their lives.

There is documented evidence that retained primitive reflexes underlie difficulties in the learning of basic skills such as reading, writing and copying. When primitive reflexes are inhibited but postural reflexes are poorly developed, the effects are often not seen until adolescent years. These youngsters have difficulty with cognitive functioning and academic performance.

Balance is the core of functioning.

Attention, Balance and Coordination are the primary A, B and C
upon which all later academic learning depends.

Sally Goddard. Reflexes, Learning and Behavior. A Window Into the Child's Mind.
OR: Fern Ridge Press. 2002

*Dr, Svetlana Masgutova. "Edu-K Opens the Door to Movement Development." Brain Gym Journal. August, 2003. p.4-7.

Babkin Palmomental Reflex

Palm-Mouth Coordination

This reflex creates the basis for the development of the Asymmetric Tonic Neck Reflex. It is crucial for this reflex to be matured for the development of the hand-articulation organ, coordination, speech and communication. This reflex plays a role in the development of facial expressions, and the dynamics of the movements of the skull bones.

If this reflex is not integrated, the child will have problems with the motor control of his hands. There will be problems with tying shoe laces. The pencil grip will be poor or unusual along with the pen held too tightly and poor handwriting. There may be problems with speech, articulation, and involuntary movements of the mouth and tongue when the child writes, plays an instrument or uses scissors.

Exercises

1. Finger Stretching
2. Snowballs
3. Dots

Asymmetrical Tonic Neck Reflex

Ears-Eyes Coordination

This reflex plays an active role in the learning process and in the development of several cognitive systems: auditory-visual perception, spatial orientation, perception-memory anchoring (patterning). It creates the foundation for the development of the hemispheric brain dominance. It is the reflex mainly responsible for creating the left-hemisphere advantage in speech and language. It is also responsible for the activation of the proprioceptive system. Coordination of the “reaction for sound and head turning” activates the processes of noticing, attention, and memory. Activation of the baby’s hearing abilities creates the basis for the development of vision.

This reflex is one of the most prevalent reasons for school failure; problems with lack of balance between focused, narrow and peripheral vision, lack of memory processes, expression of learned information, poor language development and emotional stress.

It is this reflex that allows a person to develop the ability to release emotions, access information and concentrate on it.

If this reflex is not integrated, the child will have difficulty crossing midline, easily drops things or turns them over, presses the pen when writing, and turns the paper 90 degrees and writes vertically. Adults may have lower back problems.

Exercises

1. Tracking
2. Clutching and Expanding Fingers and Toes
3. Crossover Movements

Symmetrical Tonic Neck Reflex Eyes-Ears Coordination

This reflex develops the mechanisms for quieting the body movement activity in order to activate two sensory processes – seeing and hearing. It develops binocular vision and binaural hearing. The reflex helps coordinate the vestibular, proprioceptive and visual systems. It develops the ability and sensation of being balanced, of accurate spatial and depth perception, sidedness and temporal awareness.

This reflex helps the child to train his vision to focus at short and long distances. It influences body posture and strength in the upper arms.

If this reflex is not integrated, the child will move around by sliding on his bottom, or just sits until he rises and walks. An unintegrated STNR causes poor posture. When sitting at a table, the child often lies over the book. The child may have difficulties focusing at short and long distances, problems with binocular vision and poor hand-eye coordination.

Exercises

1. Rocking on Hands and Knees
2. Wall Push Ups

Blomberg, Harald. Dr. Rhythmic Movement Training of Kirsten Linde. Level One. Sweden. 2005.

Masgutova, Svetlana, Ph.D. and Nelly Aknmatova, Ph.D. Integration of Dynamic Postural Reflexes Into the Whole Body Movement System. Poland: International Neurokinesiology Institute. 2004.

THE ROOT SKILLS OF LEARNING: Reflex Indicators Dr. Harald Blomberg

Directions: On a scale of 0 – 5, mark each of the following statements.

0 = not noticeable

5 = very noticeable

1. only likes to wear loose clothing	0	1	2	3	4	5
2. has a difficult time sitting still	0	1	2	3	4	5
3. is afraid of the dark	0	1	2	3	4	5
4. is oversensitive to sounds	0	1	2	3	4	5
5. is oversensitive to light	0	1	2	3	4	5
6. is oversensitive to touch	0	1	2	3	4	5
7. experiences motion sickness	0	1	2	3	4	5
8. has poor posture	0	1	2	3	4	5
9. has poor balance	0	1	2	3	4	5
10. is easily upset	0	1	2	3	4	5
11. is clumsy and uncoordinated	0	1	2	3	4	5
12. has a difficult time holding the head up	0	1	2	3	4	5
13. has overly flexible joints	0	1	2	3	4	5
14. has a hard time throwing a ball	0	1	2	3	4	5
15. has a hard time kicking a ball	0	1	2	3	4	5
16. leans over the table when writing	0	1	2	3	4	5
17. moves the mouth or tongue when writing	0	1	2	3	4	5
18. shakes a leg when sitting	0	1	2	3	4	5
19. has/ had difficulty tying shoes	0	1	2	3	4	5
20. has poor hand writing	0	1	2	3	4	5
21. walks/walked on toes	0	1	2	3	4	5
22. has a hard time doing somersaults	0	1	2	3	4	5
23. has difficulty crossing midline	0	1	2	3	4	5
24. has difficulty drawing/writing an eight	0	1	2	3	4	5
25. has poor endurance and stamina	0	1	2	3	4	5
26. has difficulty paying attention	0	1	2	3	4	5
27. is apathetic	0	1	2	3	4	5
28. has difficulty asserting oneself	0	1	2	3	4	5
29. is overactive	0	1	2	3	4	5
30. has difficulty with foresight and planning	0	1	2	3	4	5
31. has difficulty reading	0	1	2	3	4	5
32. has difficulty spelling	0	1	2	3	4	5
33. has articulation or other speech issues	0	1	2	3	4	5
34. experiences fits of emotion	0	1	2	3	4	5
35. is impulsive	0	1	2	3	4	5
36. taps pen, pencil, finger, foot when sitting	0	1	2	3	4	5

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