

Facilitate Motor Development Through Halliwick Methodology

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Developing functional motor patterns is often challenging for children with disabilities. Whether challenges are physical, sensory, cognitive, or psycho-emotional, every child's future quality of life depends on being able to establish motor control over his or her body. That task begins when a child first lifts his or her head and continues throughout his or her entire lifespan, as he or she adjusts to personal growth, as well as environmental changes. The Halliwick Method can greatly facilitate this motor development.

The Halliwick Method was developed by James McMillan as he applied principles of physics and engineering learning of swim skills by children with disabilities at the Halliwick School in Great Britain. Focus in the Halliwick Method is on developing motor control and independent movement in the aquatic medium. Motor control is accomplished by using the natural buoyancy of the body, and rotation in the horizontal and vertical planes to facilitate a variety of balance responses to that positioning.

For young child just learning to creep, crawl, and stand motor control means establishing upright balance against the force of gravity. In the pool, where gravity is negligible, balance means being able to rotate the body to obtain a safe breathing position. Walking requires leg strength, as well as trunk stability, purposeful action at several related joints, and endurance. Halliwick activities, because no buoyant aids are used, require a child to use his or her body to the best of his or her ability. Strength develops as muscles are used. Joint flexibility increases as children move their bodies through the full range of rotations in all body planes. Trunk stability improves as core and back muscles strengthen. Endurance and cardiorespiratory fitness increase as children participate in increasingly longer and more independent aquatic activities.

Lack of physical fitness is a major issue for school age children with disabilities. Lack of motor ability, combined with less opportunity for leading an active lifestyle, leave children with disabilities less fit than their age peers. Low fitness means less motor control because muscles are too weak to sustain the desired activity. Some disabilities include random and/or unwanted movements as part of the disability pattern. Whatever the cause of low fitness, Halliwick activities, because they are 100% reliant on the child initiating physical action, and with breathing emphasized throughout, can be used to increase strength, endurance, flexibility, and cardiorespiratory fitness.

Inhibition of movement can also result in low fitness and poor motor skills. Whether that inhibition comes from a physical cause such as the tight muscles of cerebral palsy, a psychological cause such as failure to interact with one's environment, a cognitive cause such as not understanding what is expected during an activity, or a sensory cause such as not being able to hear directions, Halliwick can assist in releasing that inhibition. Positioning is done through hands on assistance, to which the child's body

responds in a natural manner, based on buoyancy and response to rotation around the center of buoyancy. Turbulence and upthrust are used to facilitate engagement.

Halliwick methodology is highly suitable for the therapeutic environment. As a one to one technique, Halliwick can be implemented without the need of any other children. Because no equipment is required, Halliwick can be implemented anywhere, in any size pool. In implementing Halliwick, it is not necessary a child be able to touch the bottom of the pool. If a child is a part of a group, there are group Halliwick activities, all based on basic Halliwick principles. Children can progress at individual rates, while joining other children for social and psychological benefit.

Halliwick activities are safe activities. Because of the close proximity between child and therapist, immediate attention is readily available for any problem. Eye contact is facilitated in many Halliwick positions. Physical and verbal; cuing provide for controlled engagement.

Success is built in because when a child initiated movement, that movement teaches the child something about how his or her body functions in water. Feedback is immediate and praiseworthy. Quality of movement increases as the child modified his or her response to gain greater success.

Halliwick methodology makes progress documentation easier. Halliwick goals are clear-cut and observable. Halliwick activities are progressive both in the chain of tasks, themselves, as well as the sequence from totally facilitated, to assisted, to just cued, to independence. As easy Halliwick skills are learned they can be combined into more complicated Halliwick activities. All lead to independent movement, as well as future development of swim skills.

The basic tenets of Halliwick activities are also the basic tenets of learning to swim. Breath control, balance, breathing, recovery to a safe breathing position, locomotion, and change of position in water are all foundational to learning to swim. Children beginning with Halliwick activities can more easily transition to regular swim instruction.

Fearful children learn whatever happens in water depends on their own initiated movements. Control increases confidence. Children with abnormal body types learn independent movement with their bodies, not the ideal bodies of the age peer norm, but the bodies they have. This is the beauty of Halliwick. Each child builds motor control based on his or her personal body type. Mobility based adaptations come naturally as a result of reliance on natural buoyancy and buoyancy based positioning.

The best way to learn Halliwick methodology is to participate in a Halliwick water workshop. There you can experience for yourself, regardless of your swim ability, how Halliwick theory is implemented. Position is a major factor in Halliwick implementation. A water workshop will give you the opportunity to develop not only skills in hand placement, but in degree of support and type of pressure needed to facilitate independence.

Halliwick methodology will be included in the Aquatic Therapy and Rehab Institute's pediatric certificate workshop being offered May 29, 30, and 31 in Chicago. A full 5 hours will be specifically dedicated to Halliwick. This will include, but not be limited to, in-water practical application, as well as classroom content on theory, assessment, and progress documentation. A highlight of the Halliwick portion will be viewing of a video case history of a child with cerebral palsy working on independent movement in water. More information on this workshop can be found at www.atri.org.

Unable to attend the workshop? *The Halliwick Method: Water Freedom for Individuals with Disabilities*. (Grosse, S.J. 2001) is available from Aquatic Consulting and Education Resource Services 7252 W. Wabash Avenue, Milwaukee, WI 53223. \$15 +\$3 S & H). Containing over 75 pictures, including underwater photos, this resource is easy to understand for individuals new to Halliwick methodology.