Water Freedom for All: The Halliwick Method

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This article details the foundations and implementation principles of the Halliwick Method of swim instruction. This method is particularly notable for the success it generates in independent mobility by individuals with disabilities. The Halliwick Method can be very useful to facilitate aquatic participation for individuals who have had limited success in more traditional learn-to-swim programs. Discussion of the Halliwick Method includes hydrodynamic principles, skill progressions, and program implementation. Critical concepts are explained with examples. Application of Halliwick instruction to a variety of population groups is discussed. Implementation of Halliwick activities can broaden the population of individuals who, heretofore, might not have become aquatic participants. Individuals with special health problems such as obesity, individuals who are extremely fearful or who have limited prior water experiences, and individuals with disabilities can all benefit from participation in Halliwick activities. This article will provide information and resources for the aquatic professional who seeks to implement Halliwick activities.

Martha is 52 years old and obese. Her doctor had advised her to reduce her weight as she is at high risk for diabetes. As a child, she never learned to swim, but had always wanted to. She is in her third term of lessons at her community pool, but is having little success. She cannot seem to be able to control her large body and is still in the adult beginner group, getting more and more frustrated by the week.

Silas is a high school student, facing the dreaded required freshman swim class. He is sure he is going to drown. No one in his family swims. He has never been in a pool. His house does not even have a bathtub. Silas is begging the teacher to let him drop swim class, even if it means he won’t complete a course necessary for graduation and not be able to graduate.

Sally is 19. She has cerebral palsy. While she has some movement in all four extremities, she uses a wheelchair to get around her college campus. She has never been in a pool, but her school offers something called adapted aquatics, a program for individuals with disabilities. Sally wants to learn to scuba dive because she is fascinated by the beauty of the underwater world. She thinks it would be good to get some swim experience first.

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What do Martha, Silas, and Sally have in common? Each has a personal circumstance limiting his or her ability to achieve success within traditional learn-to-swim programming. Martha is obese and has a history of lack of progress in traditional swim lessons. Silas has extreme fear and very limited prior experience in water. Sally has severe limitations in voluntary physical mobility. Does each of them have the potential for learning to swim? Yes, most definitely. At the present time, regular swim lessons may not be appropriate; a Halliwick program is.

**Halliwick History**

Halliwick is a method of water orientation and swim instruction. The Halliwick Method originated in England, where in 1949, James McMillan, an engineer by profession, developed techniques for helping individuals with disabilities become independent swimmers. Based on the adaptation of scientific and hydrodynamic principles to the behavior of the human body in water, the Halliwick Method develops movement control and focuses on independent function, safety in and around water, and enjoyment of aquatic activity (Association of Swimming Therapy, 1992).

Although the Halliwick Method can be used to teach any individual to swim, it is of particular benefit when used with individuals who are not able to achieve success within traditional swim lesson classes. This includes individuals who have extreme fear, limited prior experiences in comparison to peers, special health problems, and/or severe physical or multiple disabilities (Grosse & McGill, 1989). Once basic Halliwick techniques are learned, individuals can further refine swim skills in more standard swim progressions (Grosse, 2001). The basic purpose of the Halliwick Method is water freedom—total independent movement in water (Wright, 1984). After that is achieved, anything is possible.

While the Halliwick Method originated as an instructional swim method, today its implementation spans many different aspects of aquatics. Individuals who are fearful gain confidence by learning to successfully control their bodies in water (Russell, 1989). Obesity is not a barrier to Halliwick activities, as motor control is based on the type of body the individual has to use. Teachers of infant and preschool aquatics have incorporated Halliwick activities to increase comfort of young children. Aquatic therapy professionals have found Halliwick progressions and hands-on positioning very useful in implementing therapeutic aquatic programs (Grosse & Lambeck, 2004). Swim lessons, as well as water exercise for maintenance of wellness, can be facilitated for individuals with disabilities when Halliwick activities are used (Association, 1982; Grosse, 2004). Halliwick activities enhance perceptual-motor development. Individuals with perceptual-motor disabilities benefit greatly from the sensory integration enhanced by acquisition of Halliwick skills (Reid, 1975). Halliwick group activities contribute to social interaction, as well as reinforcement of functional movement in the aquatic medium, making it a useful part of any recreation therapy program (Grosse, 2005).

**Foundations of Halliwick Implementation**

The Halliwick Method is based on several foundational concepts described in the next sections.
One-to-One Instruction

The Halliwick Method is applied through one instructor working with one student (Association, 1982). Each instructor is in the water with his or her student at all times until the swimmer is totally independent. This one-on-one instruction makes Halliwick an extremely safe method. Individuals who need monitoring, for exertion for example, can be closely watched. Fearful individuals feel secure because the instructor is with them. Coaching and feedback on performance is immediate, thus facilitating positive results. The amount of physical contact between teacher and student depends upon the ability of the student to achieve and maintain a stable breathing position in water, maintain balance during locomotor activities, and return to that balanced position following body rotations. Student comfort and independence serves as the guide. A safe breathing position may be standing. It might also be holding the side of the pool or maintaining a supine (back) float.

Use of Buoyant Aids

Halliwick activities and skills are done without the use of any flotation devices or buoyant aids (McMillan, 1978). The teacher provides whatever support the student may need. From the very beginning, students learn natural control of their bodies. Emphasis is on allowing the student as much physical freedom in the water as possible. Everyone’s buoyancy is different. Students must develop a feel for their own buoyancy level and work to control their own body in the aquatic medium.

Through touch, an instructor can determine exactly how much support and/or assisting control is needed at any given time. The instructor can then adjust his or her position and hold the student accordingly, allowing for maximum movement freedom. This adjustment requires a great deal of sensitivity on the part of the instructor that cannot be attained through use of flotation devices. This also eliminates the readjustment period occurring when buoyancy devices are removed. Swimmers who never use buoyant aides do not have to make that transition. When they wish to swim, they are also free from having to find a facility that stocks their preferred flotation aid.

Head Control

Independent head control is critical to development of other Halliwick skills (Association, 1982). Therefore, from the start each student works to control his or her own head and neck. All positioning in water is determined and controlled by head position, and handling done by an instructor is accomplished without physically touching the student’s head. Verbal cues are all that is provided by the instructor. This makes visual focusing particularly important. What the student is looking at often determines the overall position of the head and, subsequently, the position of the body. Verbal cues should include where the swimmer should look.

Breath Control

Halliwick students learn appropriate voluntary breath control. From the beginning, all Halliwick students learn they must blow (exhale air) every time their face
Rotations and submersion require exhilation. Therefore, blowing is practiced often. Learning to blow begins with the face out of the water, progresses to blowing on the surface (to move and/or change position of objects), and finally to blowing under water (Grosse, 2001). Being able to control breathing allows swimmers to achieve efficient positioning and, hence, better mobility. Voluntary breath control also lessens fear and builds confidence.

**Water Level**

During all Halliwick activities, the shoulders of both the instructor and the student should remain under water (Association, 1982). This ensures greater comfort for both, as water does not evaporate off the trunk and chill the body. Shoulder submersion can be achieved by standing in shoulder-depth water or bending hips, knees, and/or ankles to lower the body to that depth. Submersion of the shoulders not only maintains body temperature, but also prompts deeper breathing, enhances cardiovascular function, and helps the swimmer feel the natural buoyancy of water (Grosse, 2001).

**Mechanical Principles of Halliwick**

Hydrodynamics plays a very important role in Halliwick implementation. McMillan (1978), originator of the Halliwick Method, postulated and adapted the following principles to the Halliwick Method.

**Action/Reaction**

For any action of the body in water, there is an equal and opposite reaction. For example, turning the head to the side will cause the body to roll in the direction of the turn. Thinking of the body as a lever, lifting the head will cause the feet to lower. One movement will facilitate another.

**Buoyancy**

The human body floats. Rely on the natural buoyancy of the submerged body. Movement of the body in water will occur around the body’s center of buoyancy, located in the chest region. For example, consider reversing direction from a back swimming position, moving in one direction to a front stroke in the opposite direction. Moving from a horizontal supine position to the horizontal prone position the body will pass through vertical position. In making this 180° transition, the body rotates around the center of buoyancy.

**Head Control**

Position of the head determines the general position of the rest of the body. Tipping the head back and looking at the ceiling will cause the body to recline backwards. Putting the head forward, face into water, will cause the body to recline forward until achieving a prone float.
Rotation

The body rotates both horizontally and vertically around a specific body point, the body’s natural center of buoyancy. Learning to control rotation through head position will increase independence and confidence.

Turbulence

Halliwick swimmers learn to move in spite of action of moving water. The body must respond to turbulence either by working with it or against it during all aquatic movement. Turbulence is generated by other swimmers as well as by nature when swimming in the outdoor environment.

Upthrust

Coming up after submerging is facilitated by upthrust, which is an upward force opposite to downward gravitational force and is generated by natural buoyancy. Becoming accustomed to upthrust lessens fear of sinking and/or drowning. Being able to relax and use natural upthrust saves energy and increases movement control.

Halliwick Method Activities

Halliwick Method swimming instructional activities can be grouped into the following eight general categories:

• Water entry and exit
• Breath control
• Water orientation and locomotion
• Vertical rotation
• Lateral rotation
• Combined rotation
• Turbulence
• Submersion

Note that none of these categories includes traditional swim strokes and/or water exercises. Once Halliwick activities are mastered, with the resulting free and independent movement through the water, more traditional aquatic skills can be taught. Halliwick instruction comes before traditional strokes and exercises.

Water Entry and Exit

Swimmers are encouraged to be as independent as possible as they get into and out of the water. Use of walk in steps, a ramp, or ladder can facilitate entry for individuals unable to enter over the side. If physical assistance is necessary, the swimmer seated on deck can be assisted by placing his or her hands on the shoulders of the in water instructor and leaning forward as the instructor eases them into the water. Exit can also be assisted. The swimmer faces forward and crawls over the
side while the instructor in the water assists from behind. The ultimate Halliwick water entry is from a wheelchair seat directly into deep water like a sitting dive. This skill is only performed by advanced Halliwick swimmers.

**Breath Control**

Blowing is the key to breath control (Association, 1982). Swimmers should be prompted to blow whenever their faces are near, on, or in water. Having swimmers practice blowing with small equipment items can provide feedback on exhalation. Flip eggs (i.e., small balls like a table tennis ball with a collar) will turn from one color to another with an appropriate amount of exhalation.

**Water Orientation and Locomotion**

Walking, hopping, running, skipping, kangaroo jumping, giant stepping, and all other forms of upright locomotion aid in the development of balance in the water. Locomotor activities also increase circulation and help maintain body temperature. Individuals needing balance assistance can be aided by the instructor using hand to hand contact in a front facing position or by the teacher providing rib cage support from a rear position. If hand-to-hand contact is used, fingers should touch, not hold or grab. If holding from the rear, the instructor should provide only enough support to keep the individual’s head above water (Grosse, 2001).

**Vertical Rotation**

Beginning in the vertical position, vertical rotation causes the body to move forward into a prone float or backward into a supine float. Once in a horizontal position, vertical rotation is used to return to vertical. At the extreme, forward vertical rotation results in a front somersault, and backward vertical rotation causes a backward somersault. Learning vertical rotations begins with mastering head lift (i.e., tipping the head back to look at the ceiling) and head tuck (i.e., tipping the head forward to look at the stomach). The degree of head movement is gradually increased as competency and control is achieved. When moving from back to front, and vice versa, the body passes through a position perpendicular to the pool bottom. When the face approaches the water surface, the student is cued to blow (Association, 1982).

**Lateral Rotation**

Beginning in a supine position, lateral rotation turns the body sideward to the left or right. This rotation is initiated by turning the head in the direction of the desired roll. Lateral rotation of 180° rolls the swimmer into a prone position. Lateral rotation of 360° rolls the swimmer from supine to prone and continues a full rotation back to the starting supine position. Lateral rotations can also involve a change in direction of the lateral roll. A lateral roll to the right can be reversed by turning the head to the left or opposite direction. The body will then change direction of the roll and return to a stable supine position. Usually, the change in direction is taught first. The swimmer tips slightly to one side and regains a stable position by turning his or her head to the opposite side. The greater the degree of tip, the longer the swimmer will need to hold the head turn to regain balance. As with other activities,
blowing when the face approaches or enters the water is included as part of this learning activity (Association, 1982).

**Combined Rotation**

Falling into the pool and gaining a safe breathing/resting position, for example, requires combined rotation. The swimmers enter the water by moving forward through vertical rotation. Once in or under the water, they perform a lateral rotation as their body rises to the surface using upthrust. This places the swimmers in a supine position for resting and breathing (Association, 1982).

**Turbulence**

Moving water creates turbulence. Maintaining a supine floating position and/or swimming in turbulence is an important skill. Swimmers develop this ability by gradually increasing their experience in turbulent conditions during individual skill practice (Association, 1982).

**Submersion**

Being submerged under the water and allowing one’s body to rise back to the surface due to upthrust allows the person to practice the experience of submersion and upthrust. With the swimmer in a prone float position or jellyfish float, the instructor gently presses down on the swimmer’s upper back. Initially, pressure is just enough to submerge an inch. The swimmer’s body will bob back to the surface. The swimmer can then rotate to a breathing position, using either vertical or lateral rotation. As comfort with submersion is established, the push down by the instructor can gradually be increased (Association, 1982).

**Halliwick Class Organization**

Although Halliwick is an individualized instructional method, group participation is the usual organizational format (Association, 1982). A Halliwick group leader or teacher leads all activities. Each Halliwick swimmer has his or her specific instructor working with him or her. Several of these pairs make up a Halliwick group. There are a great many activities in which the entire group participates together to reinforce learning and apply Halliwick skills. Interacting with other swimmers provides an enjoyable social experience. Halliwick learning games and activities foster skill mastery as all teachers and students help each other (Grosse, 2001).

**Halliwick Results**

Halliwick is a foundational method. The hydrodynamic principles represented in the Halliwick Method are the basis for all instructional swim programs. Any swimmer starting out with Halliwick instruction will be in an excellent position to transition easily to learning more traditional swim skills such as strokes (Grosse, 2001). Halliwick is not an end in and of itself. It is a beginning. Once Halliwick skills are mastered, Halliwick swimmers, now independent and comfortable in the
water, can progress into general group learn to swim classes. Halliwick is just the beginning step along the aquatic programming continuum (Wright, 1984).

Halliwick instruction provides physical and social as well as intellectual benefits. Throughout the process, all Halliwick swimmers improve physical fitness as part of the learning process (Grosse, 2004). Strength, endurance, and cardiovascular function all improve as swimmers use their own muscles to perform Halliwick skills. Lack of buoyant aids and the minimal support by instructors helps ensure functional fitness development (Martin, 1981). Skill refinement occurs as students increase muscle control. Body fat can be reduced through participation in more vigorous physical activity.

Social skills grow out of group and partner activities. Halliwick activities often involve cooperative efforts. The resulting accomplishment in social skills builds self-esteem. Halliwick games and contests are FUN. Everyone, teachers and students alike, participates.

Following the development of breath control skills, more controlled rhythmic breathing used in strokes is easier to master. Rotations and basic locomotor Halliwick activities can, through individual coaching, be refined into more task-specific stroke components. Halliwick swimmers already have learned change of position and recovery skills. Most important, comfort and relaxation during all types of movement through water facilitates skill learning.

For individuals with severe physical and multiple disabilities, mastering Halliwick skills is a longer process (Grosse, 2001). Breathing, in particular, often takes considerable time. Individuals with more severe physical and multiple disabilities are the population the Halliwick program (McMillan, 1978) was specifically designed to serve. It is the success that Halliwick techniques generate that is its major advantage.

Individuals who can function independently and learn skill progressions at a typical rate should be in general group learn-to-swim classes. Some individuals will learn at a slower rate and may need additional adaptations but also may succeed in regular programs. Similarly, some Halliwick swimmers will progress more quickly, while others may take years developing water freedom.

The only disadvantage to implementation of Halliwick is its reliance on a one-to-one instructor-student ratio. Almost any educational effort that works with individuals with severe disabilities usually requires this same level of individualization. The initial investment in instructor time is realized when Halliwick swimmers become independent and comfortable in the water, often allowing them to transition to group learning situations.

Not all Halliwick swimmers will have specific, documented disabilities. Halliwick is for individuals who cannot achieve success in any regular program, no matter what the reason for that lack of success. Some individuals need one-on-one assistance in water. Other individuals require greater development of foundational aquatic skills. Repeating a general class over and over again does nothing for self-esteem and, in fact, may lower it dramatically. Dropping out of aquatics serves no long-term purpose. Where traditional classes are not appropriate, even with modification, Halliwick may be the answer.
Martha is learning to swim late in life. Her weight is a definite factor in her lack of success, as it affects her balance in water. While not an individual with a typical disability, Martha does need an individualized program as will many individuals who are obese. The breath control Martha has learned in Halliwick has reduced her fear of losing her balance. Mastering Halliwick rotations has freed her from the disorientation her lack of balance has caused. No longer afraid of tipping over, Martha now can rotate freely in water and is working on locomotor activities as a lead-up to swimming skills and preparation to return to class lessons.

Fear is a factor for many individuals. Silas has not had the same aquatic experiences as the rest of his peers. Recognizing this, his swim teacher gave him several after school Halliwick sessions, working specifically on breath control and on rotations. Having someone in water with him gave Silas confidence. He is now able to do lateral, as well as vertical rolls, combined with submersion and is back on track in regular swim class.

Sally enjoys her Halliwick sessions. She still needs physical assistance during performance of most Halliwick activities. Blowing out is difficult. Her head control is improving and she can regain a stable supine float following a 70° tip to the side. She also readily participates in Halliwick group games. Sally is particularly skilled in playing snake and is getting great cardiovascular exercise at the same time. Sally is highly motivated. Taking scuba diving class is a big goal. Through Halliwick, she can achieve her goal.

References


