

# *Assessments in Therapeutic Aquatics: A Variety of Choices*

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If we were discussing assessment in a land-based environment, we would have a myriad of assessment instruments to select from. In motor development and fitness alone there are over 60 documented, published, assessment instruments (Kasser and Lytle, 2005). Move to the water environment and choices in assessments narrow decisively, almost to the point of leading aquatic professionals to believe in-water assessment is impossible. Add to this the very limited knowledge about in-water assessments held by insurance companies and the situation may appear dire.

However, there are alternatives and choices to be made in order to provide in-water assessment of client progress. It is up to professionals in therapeutic aquatics to become acquainted with these alternatives and use each of them to provide documentation of progress. It is only through this familiarity and use that client progress through therapeutic aquatics can be truly assessed with accuracy. It is this accuracy that has the potential to not only justify in-water treatment, but also validate in-water assessment as an integral part of the therapeutic process.

What are the choices? Currently, there are a variety of ways to provide in-water assessment. These include standardized assessments, checklists, journaling, and rubrics.

## **Standardized Assessments**

A standardized assessment is research based and found valid and reliable for assessing the particular behaviors it addresses. There are several standardized in-water assessments. The *Ball State Water Run* is used to assess cardiorespiratory fitness. Norms are available for teens age 15 to 18 and individuals 18 to approximately age 30. (Robbins, G, Powers, D. & Burgess, S., 1991; Grosse, 2010). This test is research based and statistically validated.

Also research based are the *Water Orientation Test Alyn* (WOTA) (Tirosh, 2011) and the *Aquatic Independence Measure* (AIM) (Getz, 2006). The WOTA, published in two formats – one for individuals who can follow directions and another for individuals who cannot follow directions, assesses water orientation and in-water mobility based on Hallilwick method progressions. The *Aquatic Independence Measure* also assesses in-water mobility. However, this assessment is only available in research format. To date it has not been commercially published.

All of the above assess a broad spectrum of in-water motor function. However, none of these assessments address the more narrow treatment goals found in therapeutic aquatics. There is an extreme lack of in-water standardized assessments relating to the very specific behavioral goals found in therapeutic aquatics.

## Checklists and Journaling

Another method of assessing in-water motor performance is through the use of checklists and/or journaling. Swim instructors use check-lists to document progress for individuals learning to swim. Physical education teachers have expanded on the check-list format to document learning in a variety of aquatic skill and safety areas (Grosse, 2005). However checklists can also be used in therapeutic aquatics (Grosse, 2008). If a series of motor skills can be performed in water, a checklist can be made to document acquisition of those skills. Checklists usually are designed to note pass or fail, complete or incomplete, acquired, or absent regarding the skill or skill component being assessed.

Journaling is assessment performed by the individual being assessed. Most commonly used to document experiences, rather than specific skills, in therapeutic aquatics journaling can be used to document pain cycles, sleep patterns, eating habits, and activities of daily life. A therapeutic session does not exist in isolation. Very often the success of a therapeutic endeavor depends on the environment in which therapeutic results are actually applied in daily life. A journal provides information from outside the aquatic setting.

## Rubrics

A rubric is a form of authentic assessment. An authentic assessment instrument evaluates behavior in a more natural, or daily life setting. In therapeutic aquatics a rubric can measure progress toward a very specific treatment goal. From range of motion in a joint to the ability to balance in a stable two foot stance, from walking 10 steps to stepping on and off a curb, a rubric can be used to measure small, but essential amounts of progress which might otherwise go unnoticed or unappreciated based on results of a standardized assessment or pass/fail check list.

The nature of in-water therapeutics, with factors of depth, temperature, equipment, turbulence, lighting, individual buoyancy, and prior aquatic experience affecting any assessment situation, makes individualization of assessment very difficult. Lack of formal in-water assessments further complicates the process of documentation of progress. A rubric can be a partial solution to problems of in-water assessment in therapeutic aquatics.

In therapeutic aquatics participant goals are very specific and often relate to rehabilitation following illness or injury. Behaviors such as walking, stair stepping, dressing, handling objects, and activities of daily living can be goals, in and or themselves. However, even walking can be broken down further into balance on one leg, transfer of weight, hip flexibility, actual weight bearing, and reciprocal arm action. How does one measure progress in mastering these very small component parts of a task? Not with a standardized assessment. This is what a rubric is for.

Anyone can design and implement a rubric. This makes a rubric a valuable tool in individualizing therapeutic assessment in aquatics. Rubrics can be customized to any person, goal, or aquatic setting. Rubrics can be easily correlated with land activities.

One major feature of a rubric is that it allows focus on very small increments of progress. Rubrics are designed by working downward from the larger goal, breaking the assessment down to view the component parts of any task or behavior (Hopple & Graham, 1995). Because a rubric allows focus on the smaller component parts of a task or behavior, it is easier to identify sticking points or areas of difficulty that are keeping an individual from meeting a goal. A rubric is like taking a magnifying glass to an individual's performance. Focus on details facilitates therapeutic intervention and eventual individual accomplishment.

A rubric can be written for almost any behavior, no matter how detailed. A rubric used in the water can measure progress when a land-based assessment might only document a failed task. Assessment in water, because the water allows for much smaller increments of progression, not only can show very small, but meaningful degrees of progress, but also can highlight areas of weakness as well as strength. Rubrics address those very specific treatment goals found in therapeutic aquatics. Once an individual successfully completes all of the rubric tasks with the highest level of performance, then it is time to initiate more formal standardized assessment, either in water or on land.

A collection of rubrics, along with information on design of a rubric based on individual client goals can be found in *Rubrics, Rubrics, Rubrics! Tools for Measuring Goal Specific Progress in Therapeutic Aquatics*. (Grosse, 2011).

## Conclusion

Which assessment is right for you and your client? Easy answer, it's the assessment that provides the most accurate information regarding the goal progress you wish to document. If you are not using a standardized test, you may, for insurance purposes, need to be very specific about the source of your assessment, as well as the gains being made as shown during the assessment you used.

Progress counts. Relate that progress to activities of daily living. Relate that progress to on-going health and fitness. Relate that progress to weight loss, improved mobility, and psychological uplift. If one assessment tool isn't providing the information you need to show the benefit of in-water treatment, either select another assessment OR determine why your treatment protocol isn't working. Having a variety of assessment choices makes it possible for you to take a very detailed look on treatment results and do a detailed and data-based job of setting future goals.

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