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Staff Training in Aquatics for Individuals with Disabilities: The Quest

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Abstract

Trained instructors in general programs have the ability and resources to initiate and follow through with developing water safe individuals who are capable swimmers. Specific staff training to prepare individuals to facilitate aquatic participation for individuals with disabilities is currently extremely limited. The purpose of this article is to examine the barriers to specialized staff training in aquatics for individuals with disabilities, to suggest necessary staff training content, and to propose topics for further research in the area of staff training. Seeking development of quality staff training programs for those working in aquatics for individuals with disabilities is the quest.

Keywords: teaching techniques, water safety instruction, swimming instruction, adapted aquatics, learn-to-swim, swimming

Introduction

"Of course it is impossible to say just how much can be accomplished through the use of swimming strokes…but from the little that is known it seems as though the possibilities are almost unlimited" (Drew et al., 1926, p. 9). Drew and colleagues were referring to what can be accomplished by children with orthopedic disabilities through participation in swimming. This concurs with Buzzard (1919) over a century ago postulated swimming could be of excellent benefit to individuals with all forms of paralysis.

Swimming for individuals with disabilities has come a long way since those statements were published almost 95-101 years ago. It has many times over been documented that individuals with disabilities, not only those with orthopedic disability, but any sensory, cognitive/intellectual, psycho-social, or health-related disability can and should benefit from swimming.

Federal legislation has improved the accessibility swimming pools in the United States. Educational inclusion, also a result of legislation, has further opened educational opportunities national-wide, including opportunities for swim instruction as part of physical education and recreation programming. Swimming is a part of the Paralympics, Special Olympics, and a variety of other national and international level competitions. Swimming for individuals with disabilities has more than validated the suppositions of Drew et al. (1926).

Good swimmers are developed, not born in the author's opinion. Swimming is a skill and as a skill must be acquired. Because individuals with disabilities often are less able to learn and develop skills through self-teaching or peer modeling, specialized and intensive instruction is often necessary. For formal instruction, a teacher is needed. To be able to respond to the wide variance in disability

conditions, learning styles, behavioral characteristics, and environmental implications, this teacher needs specialized training.

For an individual to be able to achieve success in a general, group-oriented aquatic program, the opportunities are many and instructors are usually well trained. A variety of national level organizations, including but not limited to the American Red Cross, Ellis and Associates, Starfish Aquatics Institute, and the Y offer instructor level training. Instructors in these programs have the ability and resources to initiate and follow through with developing water safe individuals who are capable swimmers.

For an individual with a disability resulting in circumstances limiting the individual's participation in general aquatic programming, opportunities for instruction by well-qualified individuals are significantly different. Staff training to prepare individuals to facilitate aquatic participation for individuals with disabilities is currently extremely limited. Focusing on inclusion, national organizations have eliminated their specialized instructor training or folded it into the training provided for general aquatics.

The purpose of this article is to examine the barriers to specialized staff development in aquatics for individuals with disabilities so that these barriers may be resolved, and to suggest necessary staff training content, and to propose topics for further research.

Barriers to Staff Development

Current Program Status

Current national level programs to prepare instructors of swimming are for the most part lengthy and costly. The primary population of training program participants is college age, a population that is usually short on both time and money. Certified instructors of swimming often barely make a minimum wage. Better paying jobs are available on dry land. All of these conditions are common in the profession and need no substantiating documentation.

The more severe the disability, the more likely it is the individual with such a disability will need individualized instruction (Grosse, 2014a). Where are the training opportunities, funding, and resources for this type of specialization? Specialized training requires an investment of time and money on the part of participants with limited opportunities to recoup that investment through salary or other remuneration.

It is no wonder few swim instructors can find such training, even if they desire additional specialized training. Due to the very small instructor/student ratio

within specialized programs, programs serving individuals with disabilities have difficulty being cost effective. Thus, for any national organization to offer such training cost effectiveness for specialized instructor training will be questionable. In addition, while some national organizations had previously provided specialized instructor training in teaching swimming to individuals with disabilities, by the mid 1980s these programs were being phased out in favor providing support for mainstream (now inclusion) programming. Even more astounding, Fawcett (2001) referenced the NIRSA Aquatic Directors Handbook as recommending a long list of experiences and certifications for an aquatic director/manager/supervisor. Nowhere in this list is there any mention of experiences, training, or knowledge related to working with individuals with disabilities in aquatics.

It did not take long for many professionals in aquatics to recognize that regular aquatic programs cannot and do not meet the needs of all individuals. By 1990 local organizations, left without guidance from national aquatic groups, were self-designing and implementing specialized aquatic programs for individuals for whom the mainstream was not a better place to be (Grosse & Sparrow, 1990).

Instructor Attitudes

There is also the question of attitudes. How do general aquatic program swim instructors feel about teaching individuals with disabilities? A study of Australian swim coaches finds coaches will likely include an athlete with intellectual disability out of obligation, but then based on attitude, the same coach will neglect that athlete (Hammond et al., 2014). Taking a broader approach, Connatser, Block, and Lepore (2000) surveyed aquatic instructors' beliefs about teaching swimming to individuals with disabilities in inclusive settings. They found that instructors' beliefs, attitudes, and perceptions were more favorable toward teaching aquatics to individuals with mild disabilities than individuals with severe disabilities. A very similar published study confirmed these findings (Connatser et al., 2002), as did another study by Conatser in 2008. This most recent study also showed swim instructors were less favorably inclined toward teaching individuals with more severe disabilities and disagreed over whether or not individuals with more severe disabilities should be included in regular aquatic programming. Over half of the study respondents, while favorable to inclusive practices, still had segregated adapted aquatics programs.

Inferences can also be made from research on attitudes of physical education pre-service professionals since swimming usually is a part of physical education curricula. Rizzo and Kirkendall (1995) found that attitudes, in addition to relating to degree of disability, also fluctuated in relation to type of disability with more favorable attitudes relating to EMR and LD students and less favorable attitudes relating to BD students (note that abbreviations were those of the study

authors). They also found positive attitudes were directly-related to age of the pre-professional as well as their year in school with more positive attitudes correlating with older students as well as students with more years in school.

One population of individuals with a disability is the population of individuals with autism. Likely to exhibit behavior problems, these individuals can pose significant challenges for aquatic professionals. Kuhfuss and Lucas (2010) in studying issues related to providing aquatic experiences for this population group found that for "instructors, even those having some exposure and experience with the instruction of individuals with ASD, more support could be beneficial" (p. 16). They also noted aquatics was included in the definition of physical education in the special education legislation thus placing more importance on these findings. As Seaman (1991) noted, aquatics is part of physical education under federal legislation.

The Substance of Training

Rizzo and Kirkendahl (1995) following their research on teacher attitudes recommended "educational institutions need to establish programs that afford future (physical education) teachers favorable experiences teaching individuals with disabilities...." (p. 213). Regarding aquatic participation for individuals with autism, Jull and Mirenda (2015) more recently recommended providing training in the use of discrete trials and visual activity schedules to teach swimming skills to children with autism spectrum disorders. Regarding aquatics for children with cerebral palsy, a combination of swimming with aquatic exercise was researched by several groups with positive results (Jorcic et al, 2014; Declerck et al, 2014).

Training Goals

Based on research reviewed above, any training program for individuals interested in working in aquatics with individuals with disabilities should, focus on the following goals. A participant in such a training program should:

- Develop professional practices generating and exemplifying positive attitudes toward individuals with disabilities as capable individuals able to achieve success in the aquatic medium.
- Reduce personal negative feelings, attitudes, and fears about working with individuals with disabilities.
- Participate in activities designed to develop knowledge and skills to enhance his or her ability to provide competent instruction for individuals with disabilities.
- Participate in activities designed to develop and implement safety awareness and practices to insure a safe aquatic environment for individuals with disabilities.

- Identify parameters used to determine appropriate program placement for an individual with a disability.
- Locate program resources available for future reference in aquatics for individuals with disabilities.

These goals concurred with those established in 1974 by the Swimming for the Handicapped committee participating in the development and publishing of the professional preparation in aquatics curriculum (Arnold et al., 1974).

While participant goals and training content is of prime importance, it is also critical that any training program be cost and time effective for the population it is designed to attract. When it is too expensive, the cost of training will be prohibitive. When the course is too lengthy, the potential participants will either not commit the time or will fail to participate fully in all training activities.

Training Content

To be effective, training programs should include the topics of safety and emergency response, setting priorities in programming, benefits of aquatics, characteristics of specific disability groups, individualizing aquatics, programming, and resources. Any program should take the position, in agreement with Seaman (1991), that anyone at any time may be facing a challenge that keeps him or her from achieving success in a regular aquatic program.

This position of addressing all children unable to be successful in regular programming also coincided with that included in discussion of challenges facing professionals working in a adapted aquatics in the approaching 21st Century as discussed in 1995 in the *Journal of the International Council for Health, Physical Education, Recreation, Sport and Dance* (Grosse). Among the more specific challenges discussed are the challenges of working with children of cocaine addiction, physical abuse, and neurobiological disability, as well as issues of contagion, hepatitis, and HIV. As the predicted challenges have become realized, necessary training content has expanded.

Now, with an increased target population and a broader range of content topics, training time and associated costs are even more of an issue. Attitudes toward individuals with challenges are still contributing factors. Inclusion in regular group aquatics clearly influences potential for individualized instruction. Appropriate staff training is still a major need within the profession.

Implications

Research and practice to date has brought us to a point of needing greater specificity in resulting recommendations. We should be long past the point of needing to prove

the value of swimming for individuals with disabilities. We should also be past the point of general program success stories. Time and monetary constraints dictate training must be concise, practical, functional, and tailored to meet the needs of aquatic staff from program volunteers to aquatic management, professionals. In order to have a research base on which to design future training programs the following research foci are recommended.

- Attitudinal studies must be replicated with greater depth. While it may be interesting to learn some individuals may be "uncomfortable" or "unprepared", those terms can encompass a wide variety of specifics. Key questions should address what it is about working with individuals with disabilities that makes someone uncomfortable. Possibilities might include fearing to hurt the person, fear of doing something "wrong", or wanting to avoid contagion of some type. There is no way to remediate uncomfortable feelings without knowing from whence they come. Key questions should also include a survey of the specific areas of knowledge and experience that an individual finds him or herself lacking. Knowledge of specific conditions to safety precautions, use of equipment and teaching techniques are just a few possibilities.

- Priorities for time and resource allocation for staff training should be researched and recommended. No training session(s) have the option of being open-ended. What content is the highest priority for training? What topics can be "optional"? How long will it take to present appropriate material?

- Should training be multi-layered? Do those who will administer programs need to participate in the same training as those who, on the other end of the spectrum, will be program volunteers? Can these, and all groups, train together or should they participate in training specifically for their coming tasks?

- What training prerequisites best serve development of professionals in the field? Should prior experience in teaching and/or coaching swimming be required?

- What specific teaching techniques related to particular disability groups should be included in the training? Research shows some communication systems work better than others for individuals with autism spectrum disorders (Grosse, 2014a). Should these techniques be included in training and are there other techniques related to different disability groups that are also pertinent?

- What types of training do instructors and coaches of elite level swimmers with disabilities have that enables them to develop elite level swim ability in a person

with a disability? Can this knowledge be used in the generic training of individuals desiring to teach swimming to individuals with disabilities?

- How is staff training to be evaluated? Particularly in situations where every interested person participates in the same training, what serves someone with prior experience may be very confusing for the individual with no experience. In reverse, what is the best training for an entering professional may be boring and ineffective for someone with experience. Either circumstance can result in a negative evaluation of a very good training format and content.

- How can staff training in aquatics for individuals with disabilities be made cost and time effective? Without recognizing and addressing practical implementation issues, no program, no matter how well designed, can succeed.

Conclusions

We should, as a profession, be long past looking solely at feelings and attitudes. What is needed are specific training program recommendations based on original and significant evidenced-based research studies rather than on replication or anecdotal experience. Individuals with disabilities as well as any individual for whom regular aquatic programming is not appropriate, can benefit from participation in aquatics. These individuals need and deserve instruction by professionals with the same high level of training afforded all other aquatic participants. Our quest is to make training programs to produce these professionals a reality.

References

Arnold, L., Busch, W., Capozzoli, D., Crouch, C., Lawrence, C., Meehan, D., Moran, J., Reynolds, G., & Stein, J. (1974). Instructor of swimming for the handicapped. in American Association for Health, Physical Education and Recreation. *Professional Preparation in Aquatics Education—Curriculum Guidelines*. The Association for Health, Physical Education, and Recreation.

Buzzard, E. (1919). Swimming in the treatment of paralysis. *The British Medical Journal, 1*(3046), 610. http://www.jstor.org/discover/10.2307/20337618?sid=21105873578681&uid=3739976&uid=4&uid=2&uid=3739256

Conatser, P., Block, M., & Lepore, M. (2000). Aquatic instructors' attitudes toward teaching students with disabilities. *Adapted Physical Activity Quarterly*, *17*(2), 197-207. Retrieved from http://digitalcommons.wcupa.edu/kin_facppub/3.

Conatser, P., Block, M., & Gansneder, B. (2002). Aquatic instructors' beliefs toward inclusion: the theory of planned behavior. *Adapted Physical Activity Quarterly, 19*(2), 172-187.

Conatser, P., (2008). International perspective of aquatic instructors' attitudes toward teaching swimming to children with disabilities. *International Journal of Aquatic Research and Education, 2*(2), 256-265.

Declerck, M., Verheul, M., & Danders, R. (2014). *Swimming and the Physical, Social and Emotional Well-being of Youth with Cerebral Palsy*. Retrieved from the Edinburgh Research Archive at http://hdl.handle.net/1842/9459.

Drew, L., Thomas, G., & Scully, C. (1926). *Swimming as Applied to Special Cases and Kinesiology of Strokes*. Stearns & Beale.

Fawcett, P. (2001). The reasons for hiring qualified aquatic professionals. *P & R Parks and Recreation, 36*(11), 64-67. November.

Grosse, S. (1995). Aquatics for individuals with disabilities: Challenges for the 21st century. *Journal of the International Council for Health, Physical Education, Recreation, Sport and Dance*. *32*(3), 26-29. Fall.

Grosse, S. (2014a). *Aquatics for Children with Challenges*. DSL, Ltd.

Grosse, S. (2014b) *ATRI Children with Challenges Faculty Manual*. Aquatic Consulting & Education Resource Services.

Grosse, S. & Sparrow, C. (1990). New course certifications provide opportunity in adapted aquatics. *National Aquatics Journal, 6*(2), 7-9.

Hammond, A., Young, J., & Konjarski, L. (2014). Attitudes of Australian swimming coaches towards inclusion of swimmers with an intellectual disability: an exploratory study. *International Journal of Sports Science and Coaching, 9*(6), 1425-1436. https://doi.org/10.1260/1747-9541.9.6.1425

Jorgic, B., Aleksandrovic, M., Dimitrijevic, L., Zivkovic, D., Ozsari, M., & Arslan, D. (2014). The effects of a program of swimming and aquatic exercise on flexibility in children with cerebral palsy. Facta Universitatis Series: *Physical Education and Sport, 12*(2). ISSN 1451-740X.

Jull, S., & Mirenda, P. (2015). Effects of a staff training program on community instructors' ability to teach swimming skills to children with autism. *Journal of Positive Behavior Interventions*. 18(1), 29-40. https://doi.org/10.1177/1098300715576797

Kuhfuss, E., & Lucas, M. (2010). Rise to the challenge: examining the relationship of swimming & autism spectrum disorders. *Journal of the American Academy of Special Education Professionals*, Fall, 16-22.

Rizzo, T., & Kirkendall, D. (1995). Teaching students with mild disabilities: what affects attitudes of future physical educators? *Adapted Physical Activity Quarterly*, *12*(2), 205-216.

Seaman, J. (1991). A rebuttal to: 'special physical education..." Is it a more appropriate term? *CAHPERD Journal Times*, *54*(2), 10.