

# Helping families light the way in the learn-to-swim process for their child with vision impairments

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# Overview

- ▶ Working with your child's swimming instructor to understand, include, and teach your child
- ▶ Childhood vision impairment (VI) and physical/socio-emotional development in relation to learn-to-swim programs
- ▶ Teaching methods, strategies, equipment, and resources
- ▶ How families can reinforce the learning from swim lessons, and build confidence
- ▶ Advice from families of children with VI about the learn-to-swim process

# Why swimming for children with VI?

- ▶ Balance, coordination, strength, flexibility, fitness, social engagement
- ▶ Doesn't require vision
- ▶ Opportunities for mainstream (e.g., school sport) and disability-specific (e.g., Paralympics) competition
- ▶ Lifetime sport or recreational/fitness activity
- ▶ Relatively low-cost and family-friendly
- ▶ A common childhood activity, and a gateway to life experiences

# Challenges for swimming instructors

- ▶ Experience? – swimming/ additional needs/ VI
- ▶ Professional development
- ▶ Balancing demands
- ▶ Equipment
- ▶ Policies
- ▶ Time

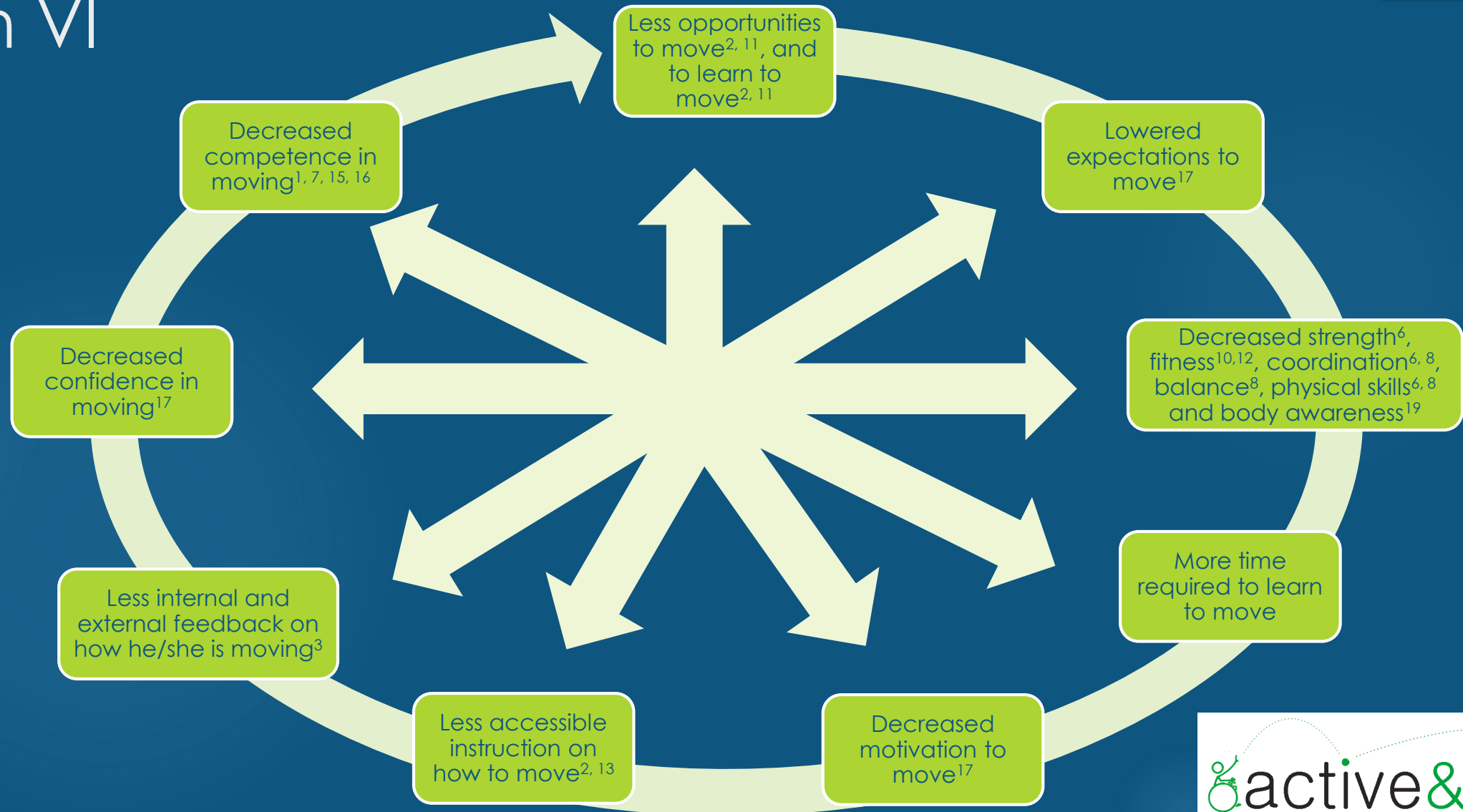
# What do swimming instructors need?

1. To understand why your child is *different*
2. To understand why your child is the *same*
3. To know how to *include* your child in games/learning activities
4. To know how to *teach* your child skills/behaviour/knowledge

# What can families do?

- ▶ Support instructors and swim programs to understand, include and teach your child
- ▶ Reinforce learning with your child, and help build confidence in the water
- ▶ Promote and encourage good instructors, and good practice

# Cycle of movement challenges for children with VI



# Impact of VI on learning to move/swim

- ▶ Harder to:
  - ▶ know where their body is
  - ▶ organise complicated movements
  - ▶ balance in water
  - ▶ have the same stamina
  - ▶ use enough force
  - ▶ understand what to do, or what others are doing

- ▶ May be less confident and/or less motivated due to fear or misunderstanding

*It is harder to learn to move, and to learn to move well.*

**NOT IMPOSSIBLE.**



# Strategies for inclusion in games & activities

- ▶ Meaningful or tokenistic? Ask the **REF**: Respectful, Equivalent, Fun
  - ▶ Context is critical
- ▶ **TREE method** (Teaching method, Rules, Equipment, Environment)
  - ▶ Explained or taught in a more accessible manner?
  - ▶ Rules modified? (e.g., work in pairs, swim a different stroke, etc.)
  - ▶ Equipment modified? (e.g., high contrast kickboards, beeping toys, etc.)
  - ▶ Environment modified? (e.g., simulation goggles, more defined boundaries, etc.)

# Common games/learning activities

- ▶ Treasure hunt
  - ▶ High contrast, larger, more numerous, with beepers. Add braille or textures.
  - ▶ Sunken treasure: string +foam puzzle piece. (No hauling up from the depths, matey)
- ▶ Duck, Duck, Goose!
  - ▶ When running, must run hand along the backs of children standing in circle
- ▶ Relay races: Use a caller/tapper at both ends, or go in pairs if needed
- ▶ Tiggy/ 'chasey': "It" carries a beeper at all times, which doesn't go underwater

# Inclusive teaching strategies

- ▶ **Descriptive language, use of touch**
- ▶ Peer teaching (pair children, instruct all, children teach and assess each other with feedback/guidance from teacher)
- ▶ 'Brailing' movements (perform the action together and at the same time, limbs aligned)
- ▶ 'Teach the teacher' / be a 'robot' (move other's body the way the movement should be performed)
- ▶ Use child with VI as the 'demo kid'
- ▶ Tactile models (dolls, artist models, etc.)
- ▶ Rewards: 'feely' or scented stickers, braille/large print certificate

# Considerations for inclusive environments

- ▶ What about all this touch?
- ▶ What about the other children? Peer teaching, celebrating/normalising difference
- ▶ Visual/ tactual environment:
  - ▶ glare/lighting
  - ▶ contrast (black and yellow excellent)
  - ▶ goggle use
  - ▶ lane ropes, tiles
- ▶ Sound environment: white noise, sudden sounds
- ▶ Orientation: trailing, squaring off, landmarks (physical and sound)

# Reinforce learning, build confidence

- ▶ Find out the next skills to learn to pre-teach them at home
- ▶ Borrow toys or items from the pool (or buy/make similar ones) to do the same activities
- ▶ Record the songs, video\* the actions – and play them in the car, bath, paddle pool  
Let your child 'teach' you what he/she has learned – give your child the control
- ▶ Practice skills: blow bubbles with a bucket, arms/ breathing at the table, kicking on the bed, arms/legs on the side of the bed, float on the floor
- ▶ Play the same games out of the pool, just use different actions
- ▶ Try to get to the pool in between lessons. Light and fluffy!

# Advice: The “most helpful thing”

- ▶ A suitable instructor:
  - ▶ Experience with VI, or willingness to learn
  - ▶ Time and ability to work with child’s level of readiness
  - ▶ High expectations and appropriate support
  - ▶ Persistent, patient, fun
- ▶ A suitable environment/ program: Quiet, warm, 1:1 lessons, at least initially
- ▶ Give your child confidence:
  - ▶ **Persist!** Keep getting in the water with your child; the swimming will come
  - ▶ Make it calm but fun

# Advice: Looking for a learn-to-swim program

- ▶ **Programs:** “VICSP is fantastic for giving confidence and the skills to swim.”  
“If you can’t access a VI-specific program then a program for kids with extra needs is the next best thing.”
- ▶ **Instructors:** “Curious about how to best support you... an understanding about what is required to teach children with VI”. “Open to learning.”
- ▶ **Lesson style:** “1:1 lessons initially at least - benefit from hands-on teaching”
- ▶ **Pools:** Quiet and warm. Not too busy. Consider the lighting if appropriate.

# Advice: Looking for a swimming instructor

- ▶ “Interested in learning, or who has completed professional development on teaching children with VI.”
- ▶ “High expectations and the necessary support and adaptations”
- ▶ “[Our VICSP instructor!] Some VI teaching experience. Otherwise one who can teach by response to the child... willing to work slowly if necessary to build a base of confidence and ability rather than forcing progression”.
- ▶ “Willing to be in the water with the child and explain things by touch as well as words.”



# Advice: Working with a swimming instructor

- ▶ Meet before the first lesson to share info (written summary?) about your child
- ▶ “Have confidence in the instructor if they have some VI experience, but also be able to step in and say something if you think your child is not responding well, or to offer advice”
- ▶ “Allow your child and the instructor time to develop a trusting relationship”
- ▶ Organise individual lessons initially
- ▶ Focus on helping the child to be confident in the water
- ▶ Importance of teaching with touch as well as words

# Other advice

- ▶ “Learning to swim can be fun, slow, sometimes stressful – but totally worthwhile.”
- ▶ “Keep communicating. As your child changes, so do their needs, and their and your anxieties.”
- ▶ “Get in the water with your child to build confidence and show them it’s fun, and swimming is absolutely something they can do”.
- ▶ “If you're not happy with the program or teacher, find another one.”
- ▶ “VI-trained teachers are incredibly valuable. Support the development of VI swim programs”
- ▶ Encourage local instructors to become teachers for children with VI through training.

# Equipment modifications

- ▶ Black & yellow gaffer tape = high contrast kickboard, noodle, etc.
- ▶ Under-inflated beach balls instead of small floating toys
- ▶ Black cloth hung on lane ropes or end of lane/ pool edge (weighted)
- ▶ Solid bright colour rash vest on instructor
- ▶ Pole w/ towelling & tape markers (depth checker) and foam ball on end (tapper)
- ▶ Beeper box in a waterproof dry bag
- ▶ Add braille or large print to items with text/colour
- ▶ Sinking toy + string + foam puzzle piece



# Resources

- ▶ Blind Sports Victoria – [www.blindsports.org.au](http://www.blindsports.org.au) +61 3 9822 8876
  - ▶ Vision Impaired Children's Swimming Program
  - ▶ Information on swimming instructors who have attended VI-specific professional development
- ▶ Statewide Vision Resource Centre – [www.svrc.vic.edu.au](http://www.svrc.vic.edu.au) + 61 3 9841 0242
  - ▶ Professional development on including children with VI in physical/sport education
  - ▶ Support Skills Program Swimming Carnival for students with VI
- ▶ Active and Able™ Youth Disability Sport Consultancy
  - ▶ [www.activeandable.webs.com](http://www.activeandable.webs.com) +61 415 170 420
  - ▶ Professional development on including children with VI in aquatic education
- ▶ The Braille Bookstore – [www.braillebookstore.com](http://www.braillebookstore.com)
  - ▶ Beeper boxes (\$8)



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# References

1. Brambring, M. (2006). Divergent development of gross motor skills in children who are blind or sighted. *Journal of Visual Impairment & Blindness*, 100(10), 620-634.
2. Columna, L., Haibach, P., Lieberman, L., Fernández-Vivó, M., Cordero-Morales, I. (2016). Motor development and physical activities for families of children with visual impairments and blindness. *Journal of Blindness Innovation & Research*. 6(1), 1-3.
3. Conroy, P. (2012). Supporting students with visual impairments in physical education: Needs of physical educators. *Insight: Research & Practice in Visual Impairment & Blindness*, 5(1), 3-10.
4. Ellis, K., Lieberman, L., & LeRoux, D. (2009). Using differentiated instruction in physical education. *Palaestra*, 24(4), 19-23.
5. Haegele, J. A., Lieberman, L. J., Columna, L., Runyan, M. (2014). Infusing the Expanded Core Curriculum into physical education for children with visual impairments. *Palaestra*, 28(3), 44-50.
6. Haibach, P., Wagner, M., & Lieberman, L. J. (2014). Determinants of gross motor skill performance in children with visual impairments. *Research in Developmental Disabilities*, 35(10), 2577-2584.
7. Houwen, S., Hartman, E., & Visscher, C. (2009). Physical activity and motor skills in children with and without visual impairments. *Medicine and Science in Sports and Exercise*, 41(1), 103-109.
8. Houwen, S., Visscher, C., Lemmink, K.A.P.M., & Hartman, E. (2008). Motor skill performance of school-age children with visual impairments. *Developmental Medicine and Child Neurology*, 50(2), 139-145.
9. Giangreco, M., Yuan, S., McKenzie, B., Cameron, P., & Fialka, J. (2005). "Be careful what you wish for...": Five reasons to be concerned about the assignment of individual paraprofessionals. *Teaching Exceptional Children*, 37(5), 28-34.
10. Lieberman, L.J., Byrne, H., Mattern, C., Watt, C., Fernandez-Vivo, M. (2010). Health related fitness in youth with visual impairments, *Journal of Visual Impairment & Blindness*, 104(6), 349-359.
11. Lieberman, L. J., Houston-Wilson, C., & Kozub, F. (2002) Perceived barriers to including students with visual impairments and blindness in physical education. *Adapted Physical Activity Quarterly*, 19, 364-377
12. Lieberman, L. J., & McHugh, B. E. (2001), Health-related fitness of children with visual impairments and blindness. *Journal of Visual Impairment & Blindness*, 95, 272-286,
13. Martin, J. J., & Choi, Y. S. (2008). Parents' physical activity related perceptions of their children with disabilities. *Disability and Health Journal*, 2(1), 9-14.
14. Oh, H., Ozturk, M. A., Kozub, F. M. (2004) Physical activity and social engagement patterns during physical education of youth with visual impairments. *RE:View*, 36, 39-48
15. Shapiro D. (2003). Athletic identity and perceived competence in children with visual impairments. *Palaestra*, 19(4),6-7.
16. Shapiro, D., R., Moffett, A., Lieberman, L., & Dummer, G. M. (2005). Perceived competence of children with visual impairments. *Journal of Visual Impairment and Blindness*, 99(1), 15-25.
17. Stuart, M. E., Lieberman, L., & Hand, K. E. (2006). Beliefs about physical activity among children who are visually impaired and their parents. *Journal of Visual Impairment and Blindness*, 100(4), 223-234.
18. van Munster, M., Weaver, E., Lieberman, & Arndt, K. (2015). Physical education and visual impairment: Collaborative communication for effective inclusion.
19. Wagner, M. O., Haibach, P. S., & Lieberman, L. J. (2013). Gross motor skill performance in children with and without visual impairments: Research to practice. *Research in Developmental Disabilities*, 34(10), 3246-3252.
20. Wiskochii, B., Lieberman, L, Houston-Wilson, C, & Petersen, S. (2007). The effects of trained peer tutors on the physical education of children who are visually impaired, *Journal of Visual Impairment and Blindness*, 101(6), 339-350.