

Environmental Effects and Considerations

The aquatic environment in which newborn, babies, toddlers and preschoolers play and learn may promote or inhibit their ongoing water familiarisation and aquatic skill development.

In part, this will depend on many environmental factors which accumulatively determine whether the child has a positive or negative experience.

This Unit of Study will reflect on these factors and discuss the various aspects of many of them.

It must also be remembered that many of these factors also impact upon the child in their home environment; in aquatic play with caregivers at any location as well as more formal water familiarisation or swimming and water safety lessons.

A safe, comfortable, non-threatening environment will promote positive outcomes and enhance learning as well as make good business sense for Swim School operators.

Senses

People primarily determine their like or dislike of their surroundings through sensory feedback.

People primarily sense through the six exteroceptive (external) senses:

1. Sight
2. Sound
3. Smell
4. Taste

5. Touch/feel

6. Balance

To a lesser extent people also receive feedback via interoceptive (internal) senses such as pain and the stretching of internal organs. These senses could play a role as a result of ingesting water and the stomach becoming distended.

The third aspect of sensory feedback is proprioception which provides feedback solely on the status of the body internally. This is the sense that indicates whether the body is moving with required effort, as well as where the various parts of the body are located in relation to each other.

The ears, eyes, muscles, ligaments and skin provide sensory information in order to guide your body enabling smooth movements, body balance, good posture, and automatically react to the immediate surrounds.

Examples of use of proprioceptive senses would be:

- The inner ear sending messages about the direction the person's body is moving in, whether it is accelerating or decelerating, rising or falling, balanced or unbalanced
- The muscle receptors providing information to the brain about what muscles and bone joints are doing
- The eyes providing depth perception

The information gained through the various sensory feedback mechanisms creates an association between the experiences and how a person feels and thus the memory associated with the activity.

Environmental Effects

With knowledge of how the body measures or gauges our surroundings via the senses, a better understanding of the impact

of the aquatic environment on the promotion of positive experiences for newborn, babies and toddlers can be achieved.

The following sub-sections will deal with each of the senses and explain what the child will feel, their likely response and how Swim Australia™ Teachers of Babies and Toddlers and other caregivers can modify their actions or improve the learning environment.

The section dealing with environmental considerations will detail the health and safety aspects of the aquatic learning environments, though some items will cross over to environmental effects.

An example would be that water quality is an environmental consideration and is going to affect visibility which is classified as an environmental effect.

Sight

Most children are visual learners from a very early age. From the time of birth to about 2 months of age, a newborn's eyesight is blurry with an ability to focus on objects 20 to 30 centimetres. The first colours they see are white, black and red.

At 3 months a Newborn will see bright colours at a greater distance, but those that move or make a noise at the same time will be more attractive. The sight that newborn first recognise and like most is usually that of their primary caregiver usually their birth mother.

Aquatic learning environments, be they a bath at home or spa tub for babies or a swimming pool for newborn, babies and toddlers should have:

- Large brightly coloured murals
- Large coloured three dimensional identifiable objects such as inflatable animals or solid/ stuffed toys
- Moving objects like mobiles

These objects should be rearranged periodically with new items introduced and others removed to create a changing (non-boring) environment.

Ideally, a parent or other recognisable caregiver, as opposed to a relatively unknown person, should accompany the young child in the water.

A toy or plaything known to the baby or toddler and suitable for use in the water could also be brought to the lessons.

When teachers make visual contact with a baby or toddler they need to be closer to be visible than for older children. Facial expressions need to be exaggerated and convey expressions of happiness.

Male teachers with facial hair may be a curiosity to babies and toddlers who may never have experienced these features before and wish to pull and explore this new found human “optional extra” further.

Items worn by teachers such as hats, jewellery and apparel are all items of curiosity for babies and toddlers. A prior negative experience with someone of similar appearance may taint the baby or toddler’s perception of their new teacher’s character.

A baby or toddler may adversely react to:

- Bright lights such as when lying on their back at home in the bath or at an indoor pool
- Sun in their eyes at outdoor locations
- Darkness
- Lack of water clarity or water visibility. This could be due to inadequate filtration, a natural environment or sore eyes from water chemistry.
- Prior water experiences such as shampoo (whilst having the hair washed) getting into the eyes and stinging them. Future similar instances will trigger a recall of this adverse memory.

Sound

Sound, along with sight is a big sensory receptor for babies and toddlers.

In an aquatic learning environment, sound comes from:

- The caregivers
- Teachers
- Other caregivers and their children
- Other classes and activities occurring at the same time
- Pool filtration equipment sound transferred through the water
- External sounds – doors opening, traffic, planes flying overhead, spectators, music or background sound

Adverse reactions can result from:

- Loud, sudden or too much noise
- Crying from other children
- Other lessons
- Sucking noises of skimmers
- The tone or inflection of the teacher's voice

As much as possible, sounds in the learning environment should be soothing. Soft background music being played may be of some benefit to “setting the scene”. Loud sounds and raised voices should be eliminated and any upset children calmed or removed from the vicinity of others as quickly as possible to reduce the likelihood of mimicry.

Water levels should be maintained to reduce sucking sounds from skimmers or pool deck drainage and baby and toddler lessons or activities scheduled to occur during “quieter times” of the aquatic facility.

Smell

Shops have been known to use the allure of smells to attract customers. Think of the smell of biscuits being baked, freshly ground coffee beans or onions frying on the BBQ!

Some smells we associate with nice sensations but other smells like rotten egg gas may evoke bad memories.

Being in water tends to enhance the sense of smell and heighten the intensity. As teachers and caregivers will be in close proximity to the child in the water, any smell associated with a pleasant or unpleasant activity can trigger a reaction at a later time or place.

Common smells in the aquatic learning environment emanate from:

> People - breath - bad breath, alcohol, food, mints, body odour, perfume, after shave, shampoo, body lotion, hair

> Pool - water - chlorine, chloramines (from lack of chlorine), salt, toilets, environmental smells from surrounds such as cars, fires, rubbish tips, lawn mowing activity etc.

Obviously, the ideal is to eliminate as many deleterious odours as possible whilst teachers should be cognisant of their hygiene habits and the scents they may exude.

Taste

Taste may seem a strange thing to discuss when facilitating water familiarisation or teaching personal safety, survival and swimming but by association adverse memories can be triggered.

Taste sensations are derived from sensors on the top of the tongue so potentially anything that goes into the mouth can provide a positive or adverse reaction.

The most likely thing to go into a child's mouth is water. This is a regular occurrence and not necessarily harmful but teachers must be aware of the implications of:

- Hyponatremia from fresh water ingestion

- Hyponatremia from salt water ingestion
- Water intoxication from over hydration
- Water aspiration leading to near drowning and drowning

These potential medical conditions are discussed in more depth under medical considerations.

The taste of the water will vary depending on:

- The water composition of the original water placed in the pool
- The ongoing water filtration mechanisms especially the micron filtration limitations of the system
- The sanitisation systems employed at the pool
- Any contamination of the pool contents
- Water additives such as salt

Other items that potentially can find a way into newborn, babies and toddlers mouths whilst they are in water are:

- Toys
- Soap or shampoo (in bathing situations which are often the child's first water experiences)
- Swim aids
- Fingers
- Face washers

Aquatic facility managers should ensure that teaching facilities are well sanitised (remember one of the most popular sanitisers – chlorine is far less effective in water temperatures above 33° celsius) and monitored regularly, have high turnover low micron filtering systems, have strategies in place to respond quickly and appropriately to any contaminations especially faecal mishaps.

Water quality is discussed further in the section on environmental considerations.

Touch/feel

The tactile feedback to newborn, babies and toddlers may come from:

- Water, air, pool surfaces and surrounds
- Parents or carers teachers other children
- Aids being fitted or used toys swimwear and clothing

More information about environmental factors will be provided in the section on environmental considerations, but the effect of the feel of the water on children is either to generate excitement and a desire to move their arms and legs or one of uncertainty of the unknown.

Air and water temperature and wind speed will determine the comfort level for children and their caregivers and thus be a factor in setting the duration of any formal lessons or play time.

Pool surrounds and surfaces also provide sensory input discussed in environmental factors.

The manner in which caregivers and teachers hold children is important. The location of the hold, the strength with which the hold is applied and security the child feels as a result, the safety that the hold provides and feeling the holder conveys to the child all affect the outcome.

The effect of water on a person's hands is to cause them to crinkle and this can sometimes seem strange to children with the occasional adverse reaction. Sharp fingernails both from children and handlers can cause damage on water-softened skin.

How children interact with each other in the water needs to be closely monitored. Children at play can inadvertently hurt each other, surrounding caregivers and teachers by throwing toys, pulling hair, pinching, gripping hard, biting or poking.

Children placed in supine positions (on their back) may find, due to the shape and direction of their ear canal in this position that water will trickle into their ears causing various reactions such as a desire to sit up, a dislike of lying on their back and an increased risk of outer ear infection (discussed under medical conditions as otitis externa). Submersion at depths below one metre brings added risks of increasing the pressure differential between the outer and middle

ear and may cause pain or rupture ear drums and if the child has a running nose can force mucus up the Eustachian canal resulting in an increased propensity for middle ear infections (otitis media).

Swim aids and toys used regularly in a wet environment such as a pool have a tendency to become receptacles for potential sources of infection.

This is discussed in greater depth in Environmental Considerations.

Balance

The water provides a three dimensional wet room for children to move through.

Once they uncover this concept, children discover the joy of moving up, down, around, through and over the water. Going from what is essentially a lineally dimensional world of movement on land requires some readjustment to the perception of space direction and balance.

Balance in relation to the holds is discussed within the section on holds.

From an environmental viewpoint, a child's balance can be affected by other activities around the child that generate splashes, waves or currents.

The changed conditions (from that of a controlled lesson environment) that a child faces at the beach, in natural watercourses or whilst engaged in aquatic play with siblings and others may cause awkward falls and inadvertent submersions leading to a radical change in the child's future mental perception of the water.

Internal

The problems relating to interceptive or internal senses are dealt with under medical conditions but an awareness of the types of issues that arise is discussed here.

Immersing the human body in water has the result of an increase in the water pressure acting upon the body. For beginners experiencing water for the first time, being submerged to the shoulders with the increased pressure makes it harder to inhale and expand their chest, whilst the pressure will force exhaled air out quicker. This foreign feeling is something that can take some time to become familiar with.

Combine this new experience with a prone (horizontal, on the front) position with a pair of large hands spread over your ribs holding you up and teachers and caregivers can understand why breathing can become difficult for some young children.

Ingestion of water or air can cause stomach bloating and eventually stomach pain.

A combination of stomach distension and water pressure places increased pressure on the bladder leading to some children wanting to make frequent toilet breaks during lessons.

Interestingly (anecdotally), the increase in internal pressure does not appear to lead to an increased desire for bowel movements.

Environmental Considerations

One component of being an effective teacher is the knowledge that the teacher has.

Another component is the teachers ability to communicate and convey this knowledge to their students (the caregiver and the child).

The third component which will have a major impact upon the child's acquisition of skills is the external environment.

Environmental considerations deals with what are the factors surrounding the child that may impact upon them and how Swim Australia™ Teachers of Babies and Toddlers, Caregivers and Aquatic Facility Managers can instigate change that will enhance the child's learning environment.

Temperature

Temperature plays a massive role in the ability of Swim Australia™ Teachers of Babies and Toddlers and caregivers to facilitate water familiarisation, aquatic play and formal swimming lessons due to:

- The differential between water temperature and body temperature is usually great
- Water subtracts heat from the body much quicker than air (approximately 4 times quicker and rising up to 30 times quicker with a wind chill factor)
- People in water generally do not have good thermal protection
- Younger and smaller children having less body core mass and proportionally a greater skin surface area exposed to water
- Younger children are generally moving less and therefore generating less body heat
- Changes in body temperature reduce a child's ability to focus on a particular task
- Changes in body temperature reduce the desire to move the limbs

The ideal learning environment (in a temperature context) should be controllable, constant and predictable.

To achieve an ideal setting this usually means indoors and temperature controlled (heated), however there are many ways of achieving good results in outdoor situations utilising some of the strategies discussed further on.

Hyperthermia

If a person is going to be in the water for an extended period of time, hyperthermia or hypothermia can become an issue.

What is the difference?

Hyperthermia is a condition occurring when the body retains excessive heat, often commonly referred to as heat stroke or sunstroke. It is usually preceded by heat exhaustion, characterised by general lethargy, dehydration, increase heat of the body extremities and headaches.

A mild form of this can occur in very warm water such as an indoor heated pool or spa pool where babies and toddlers are being taught. The condition is further exacerbated by a lack of rehydration.

The person should be removed from the water, and slowly cooled and rehydrated if possible. Mild cases can be helped by cool showers or staying wet and sitting in front of a fan to decrease the body temperature but extreme cases will require immediate hospitalisation.

Prevention can be achieved by staying out of the sun, providing shade or umbrellas over the teaching area, rehydrating regularly, and in extreme heat using fans or water misting to create cooler micro climates.

Hypothermia

Hypothermia is the lowering of the core body temperature. In a swimming sense, this is usually due to immersion in cold water for an extended time, though the colder the water and the younger or smaller the Child, the shorter the period required for the onset of symptoms.

A reduction in only two degrees of the body's core temperature is enough to cause:

- Mild to severe shivering
- The hands to become numb

- Goose-bumps
- Reduction in muscle function e.g. cannot get the thumb to touch the little finger

A two to four degree reduction in body temperature usually results in:

- Violent shivering
- Difficulty in talking
- Unfocused thinking
- Irrational behaviour
- Decreased pulse and respiration
- Lips, ears, toes and fingers turning blue (cyanosis)

A temperature loss of more than four degrees usually results in:

- Shivering stopping
- Amnesia
- Inability to use limbs
- Incoherent and irrational behaviour
- Metabolism slowing leading to organ failure and then death

To treat hypothermia it is important to understand that rapid heating will actually make the condition worse by causing cold blood from the limbs to rush back to the body core.

Treatment should consist of:

- Removal from the water
- Drying the person, especially the head
- Sheltering from the elements
- Wrapping the person in warm blankets and sharing body heat (a hypothermic person is not capable of reheating oneself. Do not rub the person). A warm (not hot) shower is also an alternative option if available
- Drinking warm (not hot) sweet drinks
- Hospitalization for severe hypothermic patients

Obviously, prevention by not entering cold water in the first place is the best option.

For babies and toddlers in aquatic programs, the following can offer some assistance:

- Keep the head out of the water and dry for as long as possible
- Wear a bathing cap to reduce heat losses
- Stay down in the water to reduce wind chill
- Place wind barriers to deflect the wind over the pool
- Wear any form of thermal retentive clothing. This can range from commercially available thin thermal wetsuits for babies and toddlers to firm fitting wet shirts, snug water nappies or even warm clothing - remember many children drown in clothes so children need to acquire skills whilst clothed.

Class strategies to counter cold water include:

- Conducting some theory before entering the water on such topics as “How drownings occur around the home”; “How parents and carers can reduce the risk of their child drowning”; “Strategies to enhance water skill acquisition at home” etc.
- Splitting the class group in two and conduct two half lessons with half the number of babies and toddlers in each group.
- Conducting the lesson near where the warm water inlets in the pool are or in the less windy/more sunny areas of the pool.

In short, do not attempt the ‘standard’ in-water lesson period of 30 minutes.

Ultimately, teachers need to monitor a child in the water when there is a potential for the child to get cold and allow children to exit when the signs are obvious that they are:

- Showing signs of being cold such as shivering, cyanosis (blue) around the lips or lethargy
- Not enjoying the experience
- No longer participating in activities

Weather

Weather obviously can affect the pool water temperature and thus babies and toddlers as discussed in Hypothermia and Hyperthermia.

Beyond this, variations in the weather conditions such as hot or cold days, wind, rain, thunderstorms, lightning and hail can create factors which teachers need to be aware of and possibly respond to. Seasonal variations and changes also create factors that may require attention by teachers.

The following table provides some weather situations, potential hazards as a result and appropriate responses for teachers.

Hot Weather

Hazard: Hot pool surrounds

Problems: Child run, feet burnt

Response: Provide shaded areas, soaky hose on pool surrounds, splash water on pool deck, wear thongs to pool edge

Hazard: Dehydration

Problems: Dehydration

Response: Drink water regularly, have personal water bottles on pool edge

Hazard: Hot metal pool fittings

Problems: Hands burnt, Child cannot hold on

Response: Be aware, use water to cool down rails before use

Hazard: Hyperthermia

Problems: Increased body core temperature

Response: See 9.3.2

Cold Weather

Hazard: Indoor Pools

Problems: Getting cold after exiting water

Response: Warm shower if possible, dry head first, wear a cap, dress for outside weather conditions

Hazard: Colds & flu

Problems: Spreading to others

Response: Exclude from water/ contact with others whilst symptoms persist

Hazard: Hypothermia

Problems: Reduced body core temperature

Response: See 9.3.3

Wind

Hazard: Flying debris

Problems: Injury

Response: Secure or put away all items around the pool

Rain

Hazard:

Problems: Unpleasant, difficult to hear

Response: Provide weather-proof area over pool, put away any clothing etc., provide verbal instructions before entering water

Thunderstorms

Hazard: Lightning and loud noise

Problems: Electrocutation, frightened Children

Response: Exit water to a dry secure place when flash to bang time lag is 30 seconds or less and wait for 20 minutes after storm has passed before re-entering water

Hot or Rainy Weather

Hazard: Envenomation

Problems: Snakes, spiders, centipedes etc.

Response: Many animals are more active in hotter or wetter weather and are often found still alive in pools. Pools should be closely inspected before entering

Air

The recommended air temperature in controllable environments is 2° Celsius above the water temperature. This helps resolve issues related to condensation, corrosion and ensure a comfortable learning environment for children. Change rooms should also ideally be warm or ambient rather than cool.

People lose body heat much quicker when the skin is moist or wet than when it is dry.

In indoor environments there should be some air flow over the surface of the pool (often regulated in building codes), but high air flow and breezes may come from:

- Open windows
- Open doorways
- Doors opening when people enter and exit
- Air conditioning outlets
- Ineffective or insufficient closing of gaps in the building construction

Strategies that can be implemented to reduce air flow:

- Close windows and doors
- Use doorway “curtains”
- Redesign or add a double door opening
- Redirect air conditioning outlets
- Infill gaps
- Move the class location to a protected area
- Add wind barriers or diffusers such as window and door screens, redirection vents on air conditioning

In outdoor environments wind and breezes can be reduced by:

- Design features like physical barriers (solid walls, fences, earth mounds etc.)
- Staying in the lee of buildings that shelter from the direction of the wind
- Placing clear plastic drop curtains from shade shelters over pools

Water

Expert opinions vary as to the exact ideal water temperature, but all are within the range of 31° - 33° Celsius. The most common form of water sanitiser – chlorine becomes far less effective above 33° Celsius; many bacteria and viruses thrive in warm conditions and the cost of heating any higher than this rises exponentially.

An appropriate sanitisation process could be:

- Chlorine
- Bromine
- Carbon Dioxide
- Salt (converted to Chlorine via electrolysis)
- Ozone
- Ultra Violet light
- High micron filtration

Sanitisation should be checked regularly and maintained according to the relevant government regulations. Sanitisation is the first step in creating a safe aquatic learning environ for children and all swimmers.

Secondly the pool should have good filtration which has the capacity to filter all the water in the pool (turns the water over) every 2 hours. The outlets into the pool should circulate the water so that the water is moving towards the skimmers or side gutters effectively and creating no “dead” spots in the pool water. This process will aid in removing any contaminants introduced to the water during lessons.

Most commercial pools use sand filters which filter to around 20 microns. Some supplement with filtration additives to collect smaller

size particles or use diatomaceous earth or cartridge filters (down to 5 microns) or high micron mechanical filters (down to 1 micron).

The advantage of filtering out smaller sized particles is that this includes many of the infectious bacteria and viruses.

The water may be contaminated from many sources:

- Air borne pollution – smog, leaves, litter
- Sunscreens
- Swimwear/ clothing fibres, washing detergents
- Body oils, deodorants, soaps and shampoos
- Uric and faecal contamination both from residues and mishaps
- Vomit and regurgitations
- Diseases and viruses

This is why many advocate that a shower and rinse prior to entering the pool is a good hygiene habit.

Pools

Pools – depth/s surfaces, entry and exit points, fittings and fixtures all may have an effect on a child's learning.

Ideally the pool should offer a variety of entry points:

- A sloping wade-in area for gradual depth change so that learners can find their own level of confidence
- A shallow wide ledge for doing 'crocodiles' – walking with arms and kicking thus learning arm and leg coordination
- A solid edge into a diving depth for 'dives' and fall in entries
- Steps to learn this form of entry into water
- A ladder to learn to limb into the water

Learners should be made aware of the variety of methods available for them to enter the water and the best way of utilising each of the options.

The pool surrounds and coping should be free of hazards with a nonslip surface. Some pool edges can snag swimwear or cause abrasions so teachers often place foam mats to soften accidental falls from standing dives and provide a smoother surface for sitting dives and “fall ins”.

Concrete surrounds and metal railings can heat up dangerously when in full sun. Teachers may need to hose down, splash water or shade these areas to keep them cool.

Some skimmer boxes were manufactured with a removable front section. Commonly referred to as “potty seats”, young children sitting in these whilst they are operating can receive life threatening injuries from the resultant suction effect on their internal organs. It is strongly recommended that pool owners should replace these or lock down the removable front so they can not cause injury.

Strange noises can sometimes emanate from skimmer boxes if the water level is not correct. Keep a couple of small toy frogs in the skimmer boxes and call the skimmers “frog holes”. The noise comes from the frogs. This turns a negative into a positive with young children wanting to go and visit the holes to see if the frogs are in there.

The return inlets to the pool can sometimes cause anxiety to young children whilst they are “monkey walking” (hand over hand) along the edge as the water jets push them off the wall unexpectedly. This can be turned into a positive by renaming the jets “tickle water” and showing learners that they existed and what they feel like. In part, water familiarisation is about becoming aware of all aspects of the aquatic environment you are in.

Ideally an area of the pool used for water familiarisation, swimming and water safety lessons for learners should be defined by lane ropes, signage or markers so that others do not swim through the area and risk colliding with learners.

The added benefit is that wash from swimmers which creates rougher water is reduced.

Time of Day

Time of day has many computations to the Teacher of Babies and Toddlers.

The water familiarisation lesson scheduled time may mean that:

- The baby or toddler needs to be woken from a nap to attend a lesson
- Is tired from being awake for so long or from other activities they have done
- Is hungry or has just eaten
- Is unreceptive to learning
- Falls asleep in the car on the way to the lesson
- The caregiver needs to be available

An aquatic facility's intensity of activities may wax and wane over a day.

Bather loads, distractions, the warmth of the water temperature and air temperature, even the water quality may vary over a 24 hour cycle.

Consider the factors and determine the ideal time to schedule lessons. The time the lesson is scheduled may be impacted by:

- Other pool activities
- Teacher and water space availability
- The baby or toddler's sleep times
- The baby or toddler's feeding times
- Caregiver's schedule
- Weather

Ideally the lesson should be scheduled so the young child is receptive to learning, is going to be happy, awake and fed and the environment is at its ideal.

Hygiene

Aquatic facility managers should be aware of local, state and national health regulations, have response procedures documented and in place and respond accordingly.

All teachers should be aware of what these procedures are and the role they play in implementation.

A range of waterborne illnesses can be spread by swallowing, breathing or with contaminated water from pools or any body of water.

The symptoms can vary widely but can include the following infections:

- Gastrointestinal
- Skin
- Ear
- Respiratory
- Eye
- Wound
- Neurological

Though water is unlikely to spread illness, the most common germs spread through water - Cryptosporidium, Giardia, Shigella, Noroviruses and E Coli cause diarrheal illnesses and skin rashes.

These are usually spread by swallowing water contaminated with faeces or by skin exposure to contaminated water.

This potential combined with the close proximity that young children, caregivers and the teacher are in provides a strong argument for exclusion of anyone with symptoms of potential infections.

Remember one infected person can infect many others with a ripple (pardon the pun) effect of decreased attendances at a swim schools for weeks after the visit.

Events that require a response by teachers and aquatic facility managers are:

- Vomiting – the forced expulsion of stomach contents by forceful muscular contractions
- Regurgitation – the passive displacement of stomach contents
- Faecal stool contamination – a solid bowel movement
- Diarrheal contamination – a result of intestinal infection
- Blood contamination – from cuts abrasions, impacts etc.

The response to a vomiting or regurgitation accident should be the same as for faecal stool contamination. Research suggests that faecal stool contaminations pose virtually no risk of infection. The time and chlorine (or other pool sanitiser) level combinations needed to kill noroviruses (from stomach contents) and *Giardia* (from faecal contamination) are similar.

- Close the pool. All pools with the same filtration system need to be closed.
- Remove as much of the contamination from the pool water using a pool scoop, net or bucket without breaking it up. After disposal of the contaminants disinfect the pool scoop, net or bucket.
- Raise the chlorine level to 2 parts per million (2ppm, note ppm = parts per million), adjust the Ph to 7.5 or less and water temperature (if possible) to 25° Celsius or higher and keep the pool filtration on.
- Once 2ppm of chlorine had been maintained for 25 minutes the pool can be reopened. it should be quickly cleaned up and the area sanitised with disinfectant. As it is usually caused by swallowing too much water it is probably not infectious.

The response for diarrheal incidents is somewhat more drastic due to the significant increased potential for others to get sick.

- Close the pool. All pools with the same filtration system need to be closed.
- Remove as much of the faecal contamination from the pool water using a pool scoop, net or bucket without breaking it up. After disposal of the contaminants disinfect the pool scoop, net or bucket.
- Super chlorinate all pools on the same filtration system
- Raise the chlorine level to 20 parts per million (20ppm), adjust the Ph to 7.5 or less and water temperature (if possible) to 25° Celsius or higher and keep the pool filtration on.

- Maintain this level of sanitisation for at least 12 hours with filtration on.
- Backwash filters and dispose of waste (do not return backwash through the filter) and replace filter media.
- Re-open pools.

A response to blood in the pool water is not really required as the risk of any germs being transmitted to other swimmers is negligible due to dilution of blood in water combined with properly sanitised (chlorinated etc.) water.

Blood spills on pool surrounds pose a slight risk and should be disinfected with a solution of 9 parts cool water to 1 part household bleach. Mix the solution and:

1. Secure the spill area to keep patrons away
2. Put on disposable gloves
3. Pour bleach solution on to spillage
4. Leave on spillage for 20 minutes
5. Wipe up remaining bleach solution
6. Remove and dispose of all soiled materials or if non disposable saturate in bleach and then air
7. Double bag and discard disposable items
8. Wash hands and any clothing

The overriding factor with all of the above, is to comply with the local, state and national Government's relevant procedures, as dictated by the relevant Health Departments.

Suggested Rules and Recommendations

Recommendations for all pool patrons

- Do not swim if you have diarrhoea or are sick as you will make others sick
- Do not swallow or drink the water. Avoid getting water in your mouth
- Shower with soap before entering the pool. Wash your hands after you go to the toilet or change children's nappies

Recommendations for Caregivers:

- Take young children to the toilet before entering the water and when they show signs or want to go
- Check nappies for suspicious packages regularly
- Change nappies in the change rooms or in the baby changing area as germs can be spread around the pool side. Baby's "rear end" should be washed with soap or wiped with germ killing tissues to remove all faecal matter before re-entering the water
- Wash your hands with soap after changing nappies and dispose of the nappy appropriately
- Dry young children before yourself. Dry heads before bodies
- Trim children's finger and toe nails so there are no sharp edges
- Enter the water safely. You may be more unbalanced when holding a child. If possible hold onto a railing for support as you enter the pool; pass the child to someone else then enter the pool or sit the child on the pool edge and whilst maintaining contact with the child enter the water first then lift the child into the pool

Recommendations for Teachers of Babies and Toddlers:

- Look for signs of children wanting to go to the toilet and respond quickly
- Notify pool management of spillages quickly
- Remove all jewellery
- Educate caregivers regarding lesson protocols
- If children are cold keep their bodies low in the water to reduce wind chill
- Look for early signs of distress from cold, heat, overexertion or water ingestion and act accordingly

Recommendations for Pool and Program Managers at Aquatic Facilities for Babies and Toddlers:

- Place signage in appropriate areas for occasional pool patrons
- Educate all pool patrons of hygiene practises
- Have policies and procedures to respond to spillage and accidents and review these regularly
- Train staff in appropriate responses
- Log all accidents and responses and monitor for any patterns
- Provide nappy disposal bins, nappy change facilities and hygiene care products
- Check the aquatic facility for rick hazards such as spiders, rough surfaces, unhygienic items, areas or practises
- Have a regular hygiene maintenance schedule using “Child and enviro” safe products
- Securely store all cleaning products with clear labels and Material Data sheets for correct handling and disposal procedures
- Educate caregivers of what actions they can undertake to make their children safer supervise children at all times around water, shut the gate to pools, learn to resuscitate (as well as teach them to swim)
- Check water quality regularly. Clean filtration, toilets, change tables and all surfaces regularly. Scrub the water line scum and respond to risk hazards when notified
- Develop procedures and be aware of hot surfaces, hot days and cold days
- Provide secure pool entry points with hand rails
- Consider installing pool fencing to control access to the pool surrounds or fence off a play area to contain young children away from the pool

Toys

Toys used in learn-to-swim programs should be easy to clean, plastic or non-porous and with particular toys allocated for the exclusive use of one child during a lesson. Look for any warning signs on toys and be sure the toys are age-appropriate.

At the end of each session the toys should be immersed in a disinfectant solution and soaked for a minimum of 9 minutes, then rinsed prior to the next use. This can be achieved by having a mesh or fabric insert in the disinfectant bucket, containing 1 cup of bleach to 20 litres of water so that the toys can be moved from disinfecting to rinsing to re-use “en-mass”.

The bucket should be safely stored away from the reach of any children with appropriate safety signage and warnings of the contents plus have a secure lid.

Hollow toys should be squeezed in the disinfectant to clean the inside, and then squeezed again to remove any excess disinfectant, rinsed in fresh water to avoid children sucking on the toy and ingesting the disinfectant then allowed to dry - preferably in sunlight. Alternate expensive technological methods such as UV light treatment or steam are also available.

Dishwashers can also do the job if the water is above 75°C but be careful that the toys do not melt or get damaged! Tie small toys to the framework with twist ties to stop them flying around in the washer.

Water toys should be regularly inspected for cuts, breakages, or any potential dangers. When not in use overnight or longer, the toys should be sanitised, hung to dry and then stored in a sealed container to maintain hygiene (stopping night-time critters from crawling all over them).

If a toy is heavily soiled, mix $\frac{3}{4}$ cup of Baking Soda with 1 tablespoon of dishwashing liquid and apply with an old toothbrush, then wipe clean. Rubbing alcohol works well with plastic stains. If the stain is very tough, try using cuticle remover. Allow the cuticle remover to set for 30 minutes before wiping off.

If plastic toys are stained try mixing cream of tartar and lemon juice, apply to the area then leave for 30 minutes.

Whatever method is used, ensure toys are well rinsed after each clean. Good hygiene is not only important, it is vital to keep children healthy.

References for Unit 9.0 to 9.3 Inclusive

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Safety For Under 5 year Olds

It is highly recommended that all Baby and Toddler and/or Swimming and Water Safety Teachers should view the Kids Alive Water Safety DVD for under 5 year olds, produced by the Federal Government.

Participants of Swim Australia Teacher courses are provided with a copy of this valuable resource produced by Laurie Lawrence.

Based upon statistical analysis of drowning and near drowning situations for young children under five years of age the following can be ascertained.

Primary At Risk Situations

- Swimming pools (in ground, above ground and collapsible)
- Bathtubs
- Garden ponds
- Hot tubs, spas, Jacuzzis
- Nappy buckets, pet bowls, fish tanks
- Toilets and washing machines
- Water tanks

Secondary risk situations include:

- River, lakes, dams and creeks
- Beaches
- Ocean

Whilst statistically dams are a secondary cause, primarily due to the proportionally small number of farms, dams are a significant factor in drowning events for babies and toddlers residing in rural locations.

For every fatality there are many more that suffer some level of permanent mental or physical inability as a result of a near drowning occurrence.

Likely Scenarios:

- A container holding water – usually clear though not always clean
- Depth is known, no currents present
- May have objects that motivate the victim to want to go to the water source
- Lacking an effective physical barrier
- Adult supervision is lacking - sometimes both parents think the other is supervising or a dichotomy of care arises

At Risk Profile:

- Primarily 0-5 year olds with the peak age being 15 to 30 month olds. Surprisingly many drowning occurrences are mid week and between 6 pm and 9 pm leading to speculation that many instances occur when both parents are present and supervision is low due to this dichotomy of responsibility. Also surprising is the relatively even spread of drowning incidents across all months of the year
- In swimming pools, a typical victim is a child aged less than 5 years, unsupervised by a caregiver, the pool is not fenced or inadequately fenced, (i.e. broken gate lock, fence broken or gate propped open) objects were readily available to assist the child to climb over the fence. Tempting objects may also be present in the pool area
- In bathtubs the propensity is for the victim to be 2 years of age or younger, left in the care of siblings a couple of years older and left “unattended” by a caregiver for a short time (i.e. 2 -15 minutes) whilst the caregiver completed housework such as cooking or answered the phone

Stay Safer Actions:

- Continually maintain effective physical barriers to all water sources including removing climbing “possibilities” from all water sources
- Supervise all children at all times. Do not rely on other children to take on an Adult’s supervision role or rely on water safety aids. Know which adult caregiver is responsible for supervision – do not assume anyone else is
- Learn CPR
- Remove all “objects of desire” that may motivate a child to go to water sources
- If possible, empty all containers of water immediately after use
- Replace lids or place covers over water sources where possible
- Do not answer the phone when supervising children, or alternately transfer supervision to another adult caregiver. Do not assume that taking the young child out of the water is sufficient. Water must be drained from the bath

Teacher Implications

Teachers should:

- Teach children swimming and personal water safety as one part of the overall “no drowning” plan
- Educate parents, caregivers and the community as well as young children of the “make safer” strategies e.g. via newsletters, websites, community presentations
- Ensure all children (students or siblings) in learning environments are fully supervised
- Promote the acquisition of water familiarisation, buoyancy and mobility skills in younger “at risk” age groups
- Make sure aquatic facilities have adequate physical barriers maintained. Everyone should know to always shut the pool gate and never prop it open
- Reinforce the pool safety rules within lessons. E.g. only walk around the pool; don’t get in the pool until the teacher or caregiver says so; only dive in deep water away from other people; play away from the pool edge; use unbreakable containers around the pool,

put toys and swim aids away, always have an Adult present and tell an Adult when you are going swimming

- Learn CPR and have a CPR chart on the pool fence. Encourage others to do the same

As well-known Baby and Toddler Teacher and former Olympic coach Laurie Lawrence says:

Kids Alive, do the five,

Fence the pool, shut the gate,

Teach your kids to swim,

It's great!

Supervise, watch your mate –

And learn how to resuscitate.

Health and Medical

The following notes are intended as an overview of common medical issues affecting participation and performance in aquatic programs.

The intention is to provide basic and relevant information for Teachers in a format which is easy to understand.

This information is not to be used as a substitute for professional medical advice.

Where Teachers suspect someone is suffering a medical condition requiring further treatment they should refer the person to a medical practitioner without diagnosis or advice - unless of course the Teacher is also a qualified medical practitioner.

Teachers should also be aware of their own health. Due to the close contact that Teachers often have with Learners in an aquatic setting, a Teacher with a contagious illness one week could result in no attendances the following week.

Ear Conditions

Swimmers Ear (otitis externa):

Inflammation or infection of the outer ear canal (extending from the outside of the ear to the eardrum). The outer ear and opening of the ear canal may become tender, red and swollen. Buzzing or humming sounds, itchiness, and/or a foul smelling discharge may also be present. The area in front of and below the ear may also be tender. Pain is often intense and the swelling and discharge may temporarily affect hearing.

The causes include:

- > Water left in the ear causing dampness and a perfect breeding ground for infection
- > A very narrow opening into the canal
- > Using cotton tip swabs
- > Having lower levels of acidity in the wax (e.g. due to diabetes or repeated ear infection)
- > A middle ear infection triggering an outer ear infection

Treatments may include antibiotics, anti-fungal preparations and steroid drops. Sometimes a fungal infection may occur resulting in pus or mould in the canal. To prevent the condition it is important to dry the canal well after swimming and bathing.

Alcohol drops will dry the canal; however they should not be used if there is a hole (perforation) in the eardrum. *Pseudomonas aeruginosa* is a particularly aggressive bacterium, which may live in poorly sanitised pools. Outer ear infections caused by the *pseudomonas* bacteria will require specific antibiotic treatment.

Middle Ear Infection (otitis media):

Inflammation or infection of the small cavity behind the eardrum. This cavity is connected to the back of the throat behind the nose by the Eustachian tube. This tube opens briefly when we swallow or yawn and air is let into the middle ear. Young Children are often prone to middle ear problems as the tube is easily blocked resulting in inflammation and infection. This most often occurs after the Child has had a cold. Infection may result in severe pain and fever and antibiotics may be required. If the eardrum becomes inflamed and sensitive, water in the outer ear may cause discomfort. Most Children grow out of middle ear problems by the age of 6 or 7. Pool water cannot travel through the eardrum to the middle ear unless the drum is perforated.

Glue Ear and Grommets:

When a middle ear infection occurs, fluid is produced behind the eardrum. Over time this fluid may become thick and sticky and cause a long-term blockage of air into the middle ear from the Eustachian tube. This may result in irritability, inattentiveness, poor balance, and ultimately hearing loss. Long term there may be speech delay and difficulty at school. To allow air into the middle ear and fluid to drain, a tiny tube called a grommet may be surgically inserted through the eardrum. The grommet will eventually fall out as the ear grows (taking from 3 months up to 1 or 2 years). Occasionally the Child may need grommets inserted again. Most Children with grommets are allowed to swim but may be asked to wear earplugs and a cap to assist in keeping the ears dry. Children with grommets should not risk forcing water into the middle ear by submerging more than 1 metre or diving.

Respiratory Disorders

Asthma:

A condition which effects breathing, caused by sensitivity of the small breathing tubes in the lungs (the bronchi). Asthma is common

- around one in five Children having a recurrent wheeze and cough. It is closely linked to family history and to allergies.

During an attack the bronchi become narrow due to:

- > Tightening of the walls
- > Swelling of the tubes
- > Mucus blocking the tubes

Attacks may last from hours to days, although some will have persistent narrowing of the bronchi.

Asthma may be triggered by:

- > Colds
- > Stress
- > Exercise
- > Allergies
- > Sudden temperature changes
- > Chemicals
- > Laughter
- > Smoke

It can be mild or severe, and with good management most Children lead a normal life without restriction. Medications are both to prevent and to treat attacks. Exercise may cause the airways to narrow and it is advised that Children take reliever medication 10 minutes prior to exercising if affected. Warming up prior to exercise is particularly important. Some Children find that swimming in heated pools is good because the air is warm and moist. Unfortunately chloramines in the pool atmosphere may irritate the airways of some Children.

Colds and Upper Respiratory Tract Infections:

This is usually a viral respiratory tract infection of the upper airways. It is not unusual for young Children to have 6 to 10 viral respiratory infections each year, mostly in the winter months due to high contact situations indoors. Most young Children have little immunity to viruses and have immature and vulnerable respiratory tracts. They usually require simple remedies (not antibiotics), and episodes usually become less frequent as Children mature. A cough may be a major feature even though the lungs are not involved. Swimming in a warm indoor environment should not make the symptoms worse. If a Child has a bacterial infection with discharge or fever they should be advised against swimming until well.

Bronchitis and Bronchiolitis:

Some viral upper respiratory infections progress down into the bronchial tubes of the lungs causing persistent coughing, wheezing and/or difficulty breathing. These Children require monitoring by their doctor, although antibiotics are rarely of assistance. As the airways mature the incidence of bronchitis and bronchiolitis usually decreases.

Whooping Cough:

Caused by the “pertussis” bacteria, Whooping Cough is a severe type of bronchitis. It is an airborne virus which passes easily from person to person. Beginning like a cold it soon develops a cough so severe that choking and vomiting are frequent. The coughing is particularly dangerous to infants and young Children.

In 1998 an epidemic in Sydney resulted in the deaths of a number of young Babies. Mass vaccination in the 1960's had almost eliminated the disease but there are now a large pool of unvaccinated Children who act as a reservoir infecting other Children and many adults. Swimmers diagnosed with whooping cough must not attend the program until the all-clear is given by their doctor.

Breath Holding Attacks:

Around 5% of young Children will hold their breath for an extended period after a minor accident, fright or upset. Cyanotic breath holding (blue spells) are the most common. After an injury or tantrum they may cry, lose their breath, and then turn red in the face and blue around the mouth. They may go faint and limp, and then be tired and confused afterwards. The attack only lasts a short time. Pallid breath holding (pale spells) are less common. They also happen after an upset. They will cry briefly and then faint and look pale. They then appear stiff and their back may arch. Afterwards they may be drowsy and sleep for a while.

Rarely does a Child have a seizure (fit) after a breath holding attack. The cause is not known, but most Children grow out of. They usually start before 18 months and stop by around 6 years. Breath-holders are usually healthy Children but should be checked by their doctor. Children who undergo forced submersions during swimming lessons may exhibit breath holding attacks. These Children are being placed under stress which is detrimental to their physical health and emotional wellbeing.

Eye Conditions

Conjunctivitis:

Transmitted through pus entering the water or contaminating toys and equipment Conjunctivitis is a highly contagious eye infection which may be. Eyes appear red and may be sore or itchy. Once completely free of discharge swimming may resume. An antibiotic ointment may be required.

Blocked Tear Ducts:

Some young Children (particularly those with Downs Syndrome) may have a congenital condition resulting in persistent blocking of the tear duct draining fluid from the eye. It is usually rectified with a small operation. These Children will have a chronic build-up of

“sleep” in the eye and may be prone to conjunctivitis infection. If the discharge is not discoloured and the eye does not appear irritated it is unlikely to be a conjunctivitis infection or contagious.

Chlorine / acid balance irritation:

Some swimmers will be particularly sensitive to the acid balance and concentration of chloramines in pool water. Fair skinned (blondes, blue eyes, red heads) may have particularly sensitive eyes. If the majority of swimmers have irritated eyes the pool chemistry needs to be balanced. Goggles may be necessary.

Skin Conditions

Hand, Foot and Mouth:

A common and mild condition caused by the Coxsackie virus or enterovirus. More prevalent in the warm months it is characterised by small blisters of the mouth, hands and feet. There may be a mild fever and the infection can pose a serious threat to unborn babies. It is very infectious and those affected should be excluded from swimming programs until the blisters are gone. Incubation is 3 to 5 days.

Impetigo:

Commonly known as school sores this condition is highly contagious and spreads rapidly in situations where Children come in close skin contact. Pussores develop that are difficult to heal, developing from simple cuts or abrasions. Boils or blisters may start to appear on other parts of the body. Antibiotics and antibacterial creams are used, and all sores should be covered until completely healed. Children should not participate in swimming programs whilst infected.

Plantar Warts:

Black warts usually appearing on the soles of the feet. Highly contagious, the virus may live in showers and pool surrounds. Warts must be treated and effected areas covered before participating in a swimming program.

Tinea:

A fungal infection often affecting the feet and thriving in the moist surrounds of swimming pools. Careful disinfection of pool surrounds and treatment of feet and shoes with antifungal preparations will assist prevention.

Eczema:

An itchy skin condition often running in families it is also known as dermatitis or atopic dermatitis.

The skin is generally:

- > Dry
- > Itchy
- > Inflamed in places
- > Oozing and weeping in places

In all people with eczema the skin is dry and easily irritated. In babies it effects the face; in toddlers the fronts of the knees and ankles and inside the wrists; in older Children and adults the folds of elbows and knees. Exposure to hot water aggravates the condition as does the drying effect of chlorine. Various moisturisers such as sorbolene and glycerine are usually recommended to combat the dryness and irritation. Cortisone creams may be used to treat severe episodes.

Infectious Diseases

Slap Cheek Disease (5th Disease):

A viral disease caused by the parvovirus and spread by droplets coughed out by infected persons. Most people get the virus as Children and do not become re-infected. Pregnant women should see their doctor if infected as the unborn baby may get a severe infection. Mostly it is a mild flu like illness lasting a few days. It is characterised in Children by bright red cheeks. It is contagious for 2 weeks prior to the rash appearing and is not contagious once the rash develops.

Chicken Pox:

A common and usually mild virus characterised by widespread blisters. It can occasionally lead to serious complications such as pneumonia and up to 100 people die from complications each year in the US. It is transmitted via airborne droplets or contact with blisters. Incubation is 2 to 3 weeks and patients are contagious from 1 to 2 days before the blisters until the blisters form scales. A person with shingles can give another person chicken pox. Immunisation is now widely available.

Measles:

Although known for its large blotchy rash spreading from the face down the body, measles is primarily a respiratory infection. It can lead to pneumonia, hepatitis or encephalitis, and prior to the introduction of immunisation in the 1960's epidemics posed a significant risk to public health. Up to the age of 6 to 8 months infants should be protected by their mother's antibodies. Incubation is 9 to 11 days and the disease is contagious from 5 days after exposure up until 5 days after the rash appears.

Rubella (German Measles):

A mild infection primarily of the skin and lymph glands it is characterised by pink or light red spots on the face and body. It can

cause serious malformations of the developing foetus and obstetricians usually check mothers for immunity.

Meningococcal Disease:

A serious illness caused by a bacterium which can invade the blood stream causing blood poisoning, or invade the lining of the brain causing meningitis. Characterised by a high fever and a purple rash (like purple dots or bruises). They may have diarrhoea or vomiting which indicates an emergency. Those with meningococcal meningitis may have no rash but usually have loss of appetite, drowsiness, headache, irritability, stiff neck, and sensitivity to light. Some people carry the virus in their nose or throat and yet are perfectly well. They contaminate others via sneezing, coughing, kissing. Young Children are most at risk.

Mumps:

An infection of the glands, especially the salivary glands at the back of the mouth. Characterised by a sore throat, headache and fever. Complications include inflammation of the testes in young males, meningitis or infection of the pancreas. Many mild cases of mumps are thought to go undiagnosed.

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Immunisation

Immunisation (vaccination) stimulates the body to produce antibodies which fight against particular types of infection. Prior to the introduction of widespread immunisation, common diseases such as Diphtheria and Whooping Cough were the highest cause of death in young Children.

(Incidentally drowning is now the highest cause of death in the under 5's). Once almost wiped out entirely, some of these diseases are making a comeback in Western countries due to lower rates of immunisation. The benefits of immunisation far outweigh the risks of possible side-effects. Unfortunately Australia now has the lowest vaccination rate in the developed world - worse than some developing countries.

Immunisation is available for the following diseases:

- > Whooping cough
- > Diphtheria
- > Tetanus
- > Measles

- > Rubella
- > Polio
- > Mumps
- > Haemophilus Influenza (type b) (Hib)
- > Hepatitis A and B
- > Chicken pox
- > Bird Flu

Notification:

Children and Adults who are not fully immunised may be at risk of infection when participating in group lessons. Babies who have not completed their 6 month vaccinations are not yet fully protected against Diphtheria, Tetanus, Whooping Cough and Polio.

Babies are not immunised against Measles, Mumps and Rubella until 12 months of age.

Some older Children and adults may not have complete protection. Young Babies, pregnant Women and those with immunosuppression (such as AIDS or cancer sufferers) may be at serious risk.

If you become aware that a participant in your program has a serious contagious disease such as those listed above, it is important that you notify participants in your program who have been in recent close contact.

Do not disclose the name of the person who is ill, rather inform them that it is a courtesy call to notify them that a person in the program has had a particular disease and that if they have any concerns they should consult their doctor.

Emergency Considerations for the Very Young

For the latest Guidelines that are a consensus of the industry views visit the Australian Resuscitation Council website <http://www.resus.org.au> Detailed below are links to specific areas of Emergency Care.

- Guideline 2.1 Priorities in an Emergency, February 2002
- Guideline 2.21 General Principles of Management of the Collapsed Person, November 1999
- Guideline 2.3 Moving an Injured Victim, November 1995
- Guideline 3.1 Unconsciousness, March 2004
- Guideline 3.3 Positioning an Unconscious Victim, November 2008
- Guideline 4 Airway, February 2006
- Guideline 5 Breathing, March 2008
- Guideline 6 Compressions, February 2006
- Guideline 7 Cardiopulmonary Resuscitation, February 2006
- Guideline 8.1 Principles of Control of Bleeding for First Aiders, November 2008
- Guideline 8.2 Heart Attack, July 2007
- Guideline 8.3 Electric Shock, July 1998
- Guideline 8.4 Shock, February 2009
- Guideline 8.5 Burns, November 2008
- Guideline 8.7 Resuscitation of the Drowning Victim, February 2005

- Guideline 8.8 Hypothermia: First Aid and Management, February 2009
- Guideline 8.9.1 Pressure Immobilisation Technique, February 2005
- Guideline 8.9.2 Australian Snake Bite, November 1995
- Guideline 8.9.3 Spider Bite, February 2007
- Guideline 8.9.4 Bee, Wasp and Ant Stings, March 1996
- Guideline 8.10 First Aid Management of a Seizure, November 2008
- Guideline 8.11 Head Injury, March 1996
- Guideline 8.12 Emergency Management of a Victim who has Been Poisoned, July 1996
- Guideline 8.13 Emergency Management of Victims of Inhalational Incidents, November 1995
- Guideline 8.15 First Aid for Asthma, November 2008
- Guideline 8.16 Heat Induced Illness (Hyperthermia): First Aid Management, November 2008
- Guideline 8.18 Management of Suspected Spinal Injury, November 2008
- Guideline 8.19 The First Aid Management of Hyperventilation Syndrome, November 2008
- Guideline 8.21 Fainting (Syncope), July 1997
- Guideline 8.22 Cold Injury, March 2000
- Guideline 8.23 Anaphylaxis – First Aid Management, February 2009
- Guideline 8.24 Stroke, December 2007
- Guideline 9.4 Guidelines for the Preparation of Posters on Resuscitation, July 1995

Guideline 9.6.2 Cross Infection Precautions in Basic Life Support, July 2002

Guideline 10.1.1 Protective Devices for Expired Air Resuscitation (EAR), November 2004

Guideline 10.1.2 The Use of Oxygen in Emergencies, November 2008

Guideline 10.1.3 Public Access Defibrillation (PAD), November 2004

Guideline 11.10 Legal and Ethical Issues related to Resuscitation, February 2006

Guideline 12.1 Introduction to Paediatric Advanced Life Support, February 2006

Guideline 12.2 Advanced Life Support for Infants and Children, Diagnosis and Initial Management

Guideline 12.3 Flowchart for the Sequential Management of Life-Threatening Arrhythmias in Infants and Children February 2006

Guideline 12.4 Medications & Fluids in Paediatric Advanced Life Support, February 2006

Guideline 12.5 Management of Specific Arrhythmias in Paediatric Advanced Life Support, February 2006

Guideline 12.6 Techniques in Paediatric Advanced Life Support, February 2006

Guideline 12.7 Management after Resuscitation in Paediatric Advanced Life Support, February 2006

Guideline 13.1 Introduction to Resuscitation of the Newborn Infant, February 2006

Guideline 13.2 Identification of the Newborn Infant at Risk, February 2006

Guideline 13.3 Assessment of the Newborn Infant, February 2006

Guideline 13.4 Airway Management and Mask Ventilation of the Newborn Infant, February 2006

Guideline 13.5 Tracheal Intubation and Ventilation of the Newly Born Infant, February 2006

Guideline 13.6 Chest Compressions during Resuscitation of the Newborn Infant, February 2006

Guideline 13.7 Medications or Fluids for the Resuscitation of the Newborn Infant, February 2006

Guideline 13.8 The Resuscitation of the Newborn Infant in Special Circumstances, February 2006

Guideline 13.9 After the Resuscitation of a Newborn Infant, February 2006

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As part of the process to develop this course, a wide range of people gave generously of their time, expertise and intellectual property.

Project manager Ross Gage developed the components of the course and drew together the industry expertise to ensure the outcome reflects the needs and thoughts of the swimming and water safety teachers dealing with Babies and Toddlers.

The review committee of Ross Gage, Chris Smith, Naomi Smith, Julie Zaccanaro, Barb Nolan, Julie Speechley, Tracey Ayton, David Speechley and Sean Reid provided valuable review and endorsement of the final process of the course.

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ASCTA provided funding and gave direction to the project. Their confidence in the ability of teachers in the aquatic industry to develop this course for the industry has meant this product is highly relevant to practitioners. ASCTA's ongoing commitment to renew this product by continuing to listen and encourage contributions to develop ancillary courses means exciting times ahead.

Swimming Australia, as the peak body for the sport of swimming in Australia, have also shown their confidence by endorsing the product.

We also thank all those who gave permission for their photos and images to appear on the CD.

We would like to also acknowledge the contributions made by many industry practitioners with suggestions on what they would like to see in the final product.

I hope you find the content of benefit and enjoy studying and viewing the photos and video.

Ross Gage

Course conceptualiser and primary author

About Laurie Lawrence



Laurie Lawrence, a former Australian Rugby Union Representative and Olympic and World Champion Gold Medal Swim Coach was born in Townsville, tropical North Queensland. His father, "Stumpy" was for many years the manager of the famous Tobruk pool on Townsville's foreshore.

During 1956 and 1960 the Tobruk pool was the training venue for the Australian Olympic Team. Swimming greats like Dawn Fraser, Lorraine Crapp, Jon Henricks, John Konrads, Murray Rose, David Theile and John Devitt were some of the many athletes that trained there. As a young boy Laurie was steeped in this environment. This was the beginning of Laurie's love and passion for swimming.

Laurie the baby teaching expert

Laurie's passion for baby swimming began after the birth of his first child in 1975. With help from his three children, Laurie carefully researched, documented and developed a program which today is internationally recognised.

Laurie's program is unique in that it:

- > Integrates baby's physical, social and emotional needs into the swimming lesson
- > Pre-Conditions baby for submersion, by teaching them to respond (hold their breath) to verbal triggers
- > Teaches baby to swim without the assistance of floatation devices
- > Encourages baby to be independent in and around water at the earliest possible age
- > Teaches baby safety skills that may one day save their life

Laurie the water safety advocate

Drowning is the greatest cause of accidental death in the under-five age group in Australia. In 1988, Laurie launched the "Kids Alive" Drowning Prevention Campaign to combat the problem. Today, with support from the Federal Government and community service advertising, the program runs nationally.

As a result drowning statistics have reduced significantly. According to Laurie there is still a long way to go. "Our target is zero deaths by drowning" In his latest project, Laurie has just spent the last 18 months working with the Federal Government and other water safety leaders to produce a ground-breaking water safety DVD for the parents of under-fives.

Laurie the swim school owner

Laurie Lawrence Swim School, a family owned and operated business, was established in Queensland in 1966. Since then the Swim School has produced a large number of State, National, Commonwealth, World and Olympic champions. Laurie has taught children to swim, progressed them through junior squads and coached many to medals at the Olympic Games. This is a unique feat in International swimming and has made Laurie Lawrence Swim School a world leader in quality teaching programs. Today Laurie Lawrence Swim School teaches children of all ages to love the water, be safe in the water and give them a relaxed natural stroke to last a lifetime.

Laurie the coach

Laurie has coached Australia's elite swimmers at Brisbane's 1982 and Edinburgh's 1986 Commonwealth Games, as well as Los Angeles 1984, Seoul's 1988 and Barcelona's 1992 Olympic Games. His coaching achievements boast 10 gold, 11 silver and 12 bronze medals from swimmers he has directly assisted at Olympic level.

Some of his best known protégé's include; Jon Sieben, Duncan Armstrong, Tracey Wickham and Steven Holland.

Laurie the motivator

Laurie's coaching achievements, his communication skills, and his unique brand of humour saw the Australian Olympic Committee make him an integral part of the Australian team at the Atlanta 1996, Sydney 2000 and Athens 2004 Olympic Games.

Laurie was part of the Australian Olympic team with the brief to unite, inspire, motivate and relax the entire team. Laurie once again joined the Australian Olympic Team at the 2008 Beijing Olympic Games and the 2012 London Games. Laurie's successes have

today made him one of the world's most sought after motivational speakers.

Laurie the academic

Laurie also balanced his life around the pool with academic studies. His academic achievements boast:

- > Bachelor of Arts Degree (James Cook University)
- > Diploma of Teaching (Kelvin Grove Teachers College)
- > Diploma of Physical Education (University of Queensland)
- > Master Coach Swimming Australia
- > International Hall of Fame Honor Coach (twice)

Julie Zancanaro



Julie Zancanaro is a swimming teacher and Paediatric Occupational Therapist.

She owns and operates a swim school in Sydney with her husband Deny.

Julie was awarded the inaugural "Meritorious Service to the Teaching of Swimming in Australia Award" in 1995, and a widely published author in the area of infant aquatics.

Julie is regularly a featured speaker at Australian and International Conferences - most notably the International Infant Aquatics Conferences in Melbourne in 1995, and in France in 1999, and the World Aquatics Baby Congresses in Wellington, NZ in 2007 and Vancouver 2009.

She is always a highlight, bringing forward cutting-edge information in a stimulating manner.

Dave DuBois



- > BFA Visual Communication, California State University Long Beach 1993
- > TAA40104 Certificate IV in Training and Assessment

- > United States Swim School Association Infant Toddler Swimming Course
- > Committee Chairman 1996 – 2003
- > Committee Member 1992 - Present

- > US Swim School Association
- Presenter at numerous national conferences

- > ASCTA
- Keynote speaker 1998
- Presenter at numerous ASCTA Conferences

> Swim Australia

- Presenter at numerous Swim Australia Conferences
- Featured presenter on the Swim Australia Tour 2001 - 2006

> Swim Coaches and Teachers New Zealand

- Presenter 2001, 2004, 2006

> World Aquatic Babies Congress

- Delegate, Los Angeles 1993, Melbourne 1995, Oaxaca 1997, Toulouse 1999
- Presenter, Buenos Aires, Argentina 2001
- Presenter, Malmo, Sweden 2005
- Organising Committee, Wellington 2007

> ASCA (USA)

- Presenter 2001

> Keynote Speaker and Presenter and numerous other international forums in the USA, Mexico, Norway, Sweden, Denmark, Iceland, New Zealand and Singapore

> Contributed to the development of the US Swim School Association's Infant Toddler Swimming Course

- Teacher/Manager/Program Director, Australian Swim Schools (USA), 1985 - January 2000
- Independent Consultant to Learn to Swim Businesses and Organisations, January 2000 -February 2008
- Head of Learning and Development, Carlile Swimming, February 2008 – Present

- > Specialist in training content development, training systems and training delivery.
- > Guiding Light Award 2003, US Swim School Association
- > Meritorious Service to the Teaching of Swimming in Australia 2004, ASCTA (First overseas recipient)

Rob and Kathy McKay



Rob and Kathy McKay and their teaching staff. Their hallmarks are excellence, experience, caring and quality.

Rob and Kathy McKay have devoted their adult careers to developing the most stimulating, child friendly, educationally sound and developmentally appropriate swim school possible. The very tangible result of their mission is the nationally acclaimed Lifestyle Swim School in Boca Raton, the couple's award-winning video series, Diaper Dolphins, their book Learn to Swim (DK Publishing), their website www.babyswimming.com and their contribution to The Experts Guide to the Baby Years (Clarkson Potter). The McKay's highly qualified team of head instructors are professionals who act not only as positive and enthusiastic role models for each student, but are trained to teach in a methodology that emphasizes patient encouragement as well as the latest techniques in aquatics.

All staff train extensively with Rob and Kathy. For teaching infants and toddlers, special study with the national pioneers and authors of the gentle, child centered (non-traumatic) method of instruction plus years of personal research, experience and active involvement in parenthood have been combined in Rob and Kathy's methodology. Rob has himself become one of the leading authorities on swim instruction for young students and the McKay's school recognized as one of the most successful in the country. He is a charter member of the United States Swim School Association (USSSA) and has frequently been a featured speaker at their national conferences. He has been a three time delegate to the prestigious National Aquatic Summit in Washington, D.C., and was named to the top 100 leaders in aquatics — "Who's Who in Aquatics". Rob was honored by the International Swimming Hall of Fame as the 1999 recipient of the Paragon Award "for outstanding contribution to Aquatic Safety". And in 2004, he received the "Virginia Hunt Newman International Award".

Internationally, Rob serves on the Board of Directors of the World Aquatic Baby Congress founded by baby swimming pioneer, Virginia Hunt Newman. The WABC's guidelines for teaching infants represent the highest standards of safe teaching practices for the psychological and physical well-being of tiny swimmers. He has represented the US as a presenter for the World Baby Swim Conference at UCLA; as a teacher-trainer for the Aquatic Symposium sponsored by the International Swimming Hall of Fame and FINA (the world governing body of swimming); and as a featured speaker in Melbourne, Australia at the International Infant Aquatic Education Conference. Rob is a two time featured speaker at the New Zealand Swim Coaches and Swim Teachers Association Conference. He has led workshops in Mexico, Norway, Sweden, Poland and New Zealand. He and Kathy have trained teachers from across the US, as well as Europe, South America, Japan, Australia, Singapore, the Philippines, Russia, Greece, South Africa, India and New Zealand. Rob is a member of the International Congress of the International Swimming Hall of Fame which advises the Board of Directors. The McKay's and their gentle, happy, learn-through-play methods have been featured in magazines and on radio and TV across the country including Redbook, Nick Jr., Working Mother, Quick & Simple, Woman's

World and Family Life magazines, CBS This Morning, the New York Post, Fitness Swimmer magazine, P.B.S., a segment of The Discovery Channel's "World of Wonder" seen in 50 countries worldwide and Japan's Nippon TV "Charismatic Teachers".

Rob has spent his life in and around water. He learned to swim at age 3; swam competitively as a youngster; throughout high school as an All-American Swimmer in Cedar Rapids, Iowa; throughout college as a varsity scholar athlete at Florida State University; and as an adult, as a Florida Gold Coast Masters record holder. He was former Assistant Men's Swim Coach at FSU and coached national YMCA record holding relays. His graduate studies in Elementary Education at FSU are complemented by Certification as a Level 4 Swim Coach (top 5% nationally) through the American Swim Coaches Association. He has been an aquatic professional for over 38 years and owned Lifestyle Swim School for 28 years.

Kathy McKay is the swim school's co-director and serves officially as Director of Program Development and Marketing. She has taught alongside Rob for 28 years and has also had the fun of being "the parent in the water" for the couple's two children, Heather and Brienne. Kathy is a graduate of Mount Holyoke College with a strong emphasis in education and educational philosophy and methods. Her thematic approach to lesson planning is always apparent in games, songs, creative play, toys and theme days at the swim school. She is a former Girl Scout leader and had the distinction of being named the "Outstanding Leader" for her city. Kathy has also provided script and marketing support for Lifestyle's Telly award-winning video series Diaper Dolphins and is the narrator for Volume II. Her writing, P.R. and marketing skills honed for such major South Florida developers as Arvida Corporation and Lennar as well as for Hilton Hotel Corporation have been put to use in Lifestyle's books, newsletters, parent guides, and press releases when she's not in the pool with her students.

Jenny McPhail



In 1994 Jenny founded Water Discovery (then Water Babies) in Queenstown to provide age relevant introductory water experiences for Babies, Toddlers and their Caregivers. It was a fascinating and intense time that presented an exciting learning curve filled with insights into how Preschoolers and their Caregivers learn through bonding with others in a fun and secure environment.

Jenny developed her own programme based on her work with Babies, Toddlers and their Parents in her previous, pre motherhood life as a nurse.

The development of the Water Discovery Lesson Planner was based on this hands-on experience and a sound understanding of the subtle physiological, emotional and intellectual levels a Child needs to reach to be able to swim.

By 2004 it was very clear to her on what she wanted to achieve - a universal programme for developing age appropriate swim teaching for Babies and Toddlers. It needed to have certain attributes to be successful – make life easier for swim schools and swimming and water safety Teachers, be extremely simple to use, encompass teacher training and inspire teachers to use their own creativity or rely on fully produced, pre-programmed lessons.

So she sold the Water Discovery swim school that year and for the past five years have concentrated on developing WaterDiscovery.org and the Lesson Planner.

Fortunately she has had a very supportive and patient husband Jeff and her 2 daughters Harriet 13 years and Scarlett 11 years both love the water. They now live in Christchurch, New Zealand.

Originally she wanted to produce a book and a series of music and movement videos outlining what she knew. But technology soon overtook her and she had to get her technophobic brain around the internet and computer systems. She figure that if she could do it, so can all swim Teachers and that the web truly is the best platform for the Lesson Planner and all Water Discovery's associated resources.

It's been a huge shift to go from providing a fun filled teaching environment to finding ways to inspire teachers and swim schools to work with activities that support the Parent/Child relationship as a learn-to-swim pathway.

Tracey Ayton



Worked in the Aquatic industry for the past 20 plus years.

- > Taught at all levels from babies to squad.
- > Swim Australia Teacher
- > Swim Australia Teacher of Babies and Toddlers
- > Swim Australia Teacher of Learners with Disability

- > Bronze accredited Coach
- > Presented at state and national conferences for Swim Australia.
- > Austswim Teacher of the Year for Infants and PreSchool Aquatics 2006 and 2007.
- > Worked at Cook and Phillip Park for the past 9 years specializing in Babies and Toddlers.
- > Developed her own program for the centre which has proved to be very successful.
- > Currently the Aqua Baby Co-ordinator of Cook and Phillip Park Aquatic Centre and the Ian Thorpe Aquatic Centre under the YMCA Sydney.
- > NSW Taskforce member for the YMCA and currently developing a special needs department working with the Rainbow Club.
- > Team leader member for the SwimSAFER taskforce for Swim Australia.
- > Passionate about teaching young Children and Parents to relax in the water. Babies need to learn to swim unaided, within their abilities. Parents need constant education about aquatic safety.

Ross Gage



- > Bachelor of Human Movement Studies (Education), University of Queensland.
- > Bachelor of Human Movement Studies (Education), Post-graduate student, specializing in psychosocial aspects of children in sport and physical reaction.
- > Tutor of Physical Ed. Student teachers, Dept. of Human Movement Studies, 1982.
- > Registered, Board of Teacher Education, 1982 –
- > Certificate IV in Training and Assessment
- > National Accredited Swimming Coach, Silver Licence
- > Austswim Teacher of Swimming and Water Safety Certificate (not current)
- > Queensland Swimming Teacher of Swimming Certificate
- > Royal Life Saving Society Examiner, Level 2 (not current)
- > Pool Lifeguard (not current)
- > Senior First Aid (not current)
- > Swimming Pool Plant Operator
- > Keynote Speaker, Learn to Swim Stream
- > World Swim Coaches Association, Gold Medal Clinic, Birmingham 1997
- > New Zealand Swimming Coaches and Teachers Conference, 1995, 2003
- > Australian Swimming Teachers and Coaches Convention, 1994
- > Speaker at
- > International Federation of Swimming Teachers Conference, Taiwan, 2008
- > Australian Swimming Teachers and Coaches Convention, 1995: Two Presentations

- > United States Swim Schools Association Conference, 1996, 1998, 2000, 2003, 2009
- > Certificate in Aquatic Leadership, Education and Practice, 1994, RLSSA
- > Presenter at
 - > Austswim Teacher of Swimming courses
 - > Austswim Teacher of Preschool Swimming Extension courses
 - > Queensland Swimming Teacher of Swimming courses
 - > National Coaching Accreditation (Swimming) courses
 - > National Coaching Accreditation (Masters Swimming) courses
 - > National Coaching Accreditation (Disabled) courses
 - > Aquatics Course, Department of Human Movement Studies, University of Queensland
 - > Editor and Publisher (“Aussie Aquatics”) – Official Journal of ASCTA (Queensland) 1983 – 1992
 - > Co-editor “National Coaching Accreditation Scheme (Swimming) Guidelines”, Australian Swimming Inc. 1987
 - > Co-editor “Aussie Sports Swimming Coaching Manual”. Australian Swimming Inc and Australian Sports Commission. 1989
 - > Contributor and Reviewer “Learn to Swim:” Australian Swimming Inc. 1992
 - > Reviewer “Beginning Swimming Coaching”, Australian Swimming Inc. 1993
 - > Contributor and Reviewer “Austswim Teacher of Infant Aquatics Accreditation Course:”, 1996 – 97
 - > Contributor and Reviewer “Austswim Teaching Infant and Preschool Aquatics” Manual, 1998
 - > Teacher and Coach, Bellbowrie Swimming Centre, 1979 – 1983

- > Manager – Bellbowrie Swimming Centre, 1983 – 84; including Teaching and Coaching
- > Lessee-Manager, Bellbowrie Swimming Centre, 1984-99; including Teaching and Coaching
- > Co-Director (and relief Teacher), Westside Swimming (swim school) 1999 -
- > Convenor, ASCTA's annual Convention: The Australasian-Oceania Swimming Professionals Convention & Trade Expo, 1994 –
- > CEO (Founding), Swim Australia, 1997 –
- > CEO, Australian Swimming Coaches and Teachers Association, 2009 –
- > Project Manager, ASCTA's Swim Australia Teacher accreditation course, 2007 – 08
- > Project Manager, ASCTA's Swim Australia Teacher of Babies and Toddlers accreditation course, 2008 – 09.
- > Consultant, Queensland Health's Toddler Drowning Prevention Campaign, 1997 – 1999.
- > Consultant, "Courier Mail" Learn to Swim Campaign 1992.
- > Consultant, Swimming Australia's GO Swim Program 2002, 2004.
- > ASCTA – Reviewer of "Drafts for Consideration:" for RLSS's Safe Pool Operation Guidelines Manual, 1997 – 2004.
- > ASCTA Delegate to Australian Water Safety Council, 1998 – 2000.
- > Chairperson (Inaugural), ASCTA National Teaching Committee, 1994 – 97; 2003 –
- > ASCTA Board Delegate to ASCTA National Teaching Committee, 1994 – 2003
- > Secretary, Australian Swimming Coaches & Teachers Association 1986 – 96

- > Board of Directors, Australian Swimming Coaches & Teachers Association 1986 –
- > Executive Director, ASCTA Queensland Branch, 1983 – 2003
- > Director, ASCTA Queensland Branch, 2003 - 2009
- > State Council, Austswim Queensland, 1984 – 97
- > Secretary – Treasurer, Brisbane Swimming Centres' Lessees Association 1989 – 94
- > Member, National Coaching Accreditation Committee of Australian Swimming Inc. 1984 – 88, 2004
- > Member, High Performance Centre Review Committee of Australian Swimming Inc. 1993 – 95
- > Bellbowrie Swimming Club Inc., Management Committee, 1982 – 96
- > Convenor, Australian Swimming Coaches & Teachers Association (Queensland Branch) Seminars 1984 – 99
- > Convenor, Coaching Stream of the International Swimming Coaching and Science Conference, 1987
- > Convenor, Modern Pool Management Seminars, Laurie Lawrence Aquatic Management Services, 1993 – 94
- > Convenor, Teacher of Swimming Accreditation Courses and Seminars, Queensland Swimming Association, 1994 – 97
- > Recipient of ASCTA's "Outstanding Contribution to the Teaching of Swimming in Australia" Award, 2005
- > Recipient of ASCTA's "Meritorious Service to the Teaching of Swimming in Australia" Award, 1997
- > Life Member, ASCTA Queensland Branch, awarded 2007
- > Recipient of ASCTA Qld's "Outstanding Contribution to Swimming in Queensland" Award, 1985
- > Recipient of the Australian Swimming Coaches & Teachers Association's 1993 Scholarship to attend the World Aquatic Babies

Conference and National Swim Schools Association Conference, Los Angeles (ASCTA's first Scholarship awarded for Learn to Swim)

> Delegate for ASCTA to the international Infant Aquatic Education Conference, Melbourne 1995

> Delegate for ASCTA, International Federation of Swimming Teachers Association, 2008 -

> Participant at every Queensland and Australian Swimming Coaching and Teaching Conference since 1982.

> Convenor, Joe King Testimonial, 1994

Barbara Nolan



> Australasian-Oceania Swimming Professionals Convention Teaching Stream Coordinator 2002-2005

> Swim Australia National Learn-To-Swim Seminar Tour Co-coordinator 2002-2005

> Swim Australia Development Manager 2002 -2005

Presenter:

> Regular Presenter Australasian-Oceania Swimming Professionals Convention.

- > Austswim Aquatic Industry Workshop 2002, 2004, 2005
- > Vicswim 2003
- > Swim Australia National Learn-To-Swim Seminar Tour
- > WABC Sweden 2005
- > New Zealand Swimming Coaches & Teachers Association
Keynote Speaker
- > Attendance Australasian-Oceania Swimming Professionals
Convention 1994 to 2009
- > WABC International Infant Aquatic Education Conference:
- > Melbourne 1995
- > Mexico 1997
- > Toulouse, France 1999
- > Sweden 2005
- > New Zealand 2007

Publications and papers:

- > Smart Swim Teachers Checklist teacher training assessment tool
- > Secrets to Good Parenting
- > Regular contributor to the Swimming In Australia Magazine
- > Regular contributor to the SwimTIPS

Editor:

- > The Swim Australia SwimTIPS

Awards:

- > Meritorious Services To The Teaching Of Swimming

Work Experience:

- > Swim Teacher / coach since 1979
- > Owner operator Nolan Swim School, Rockhampton, Queensland 15 years
- > Owner operator Dipadees Little Aussie Swim School, Brisbane
- > Owner HYPERLINK "<http://www.secretstoswimming.com>"
www.secretstoswimming.com swim information website

Qualifications:

- > Swim Australia Teacher
- > National Accredited Coach. Bronze licence
- > Certificate IV in Assessment and Workplace Training 2003:

Consulting:

- > Swim Industry consulting and mentoring to various swim schools

Shawn Read's Bio



Qualifications: Bachelor of Commerce Degree (Melbourne University). Austswim Certificate, Pre-school aquatics extension certificate, Bronze Coach.

History in Swim Industry:

I began teaching in 1986 at 16 years old. After school each day I would teach at my local swim centre. When I finished High School I attended the University of Melbourne and completed a Bachelor of Commerce Degree (1992). Upon finishing that degree I realised that I did not want to be an accountant or a lawyer, and that swim teaching was my passion.

I resumed swim teaching full time at my old swim school until 1994 when my family and I opened our own swim school (Shawn's Swim School), at 35 Richards Road, Hoppers Crossing, Victoria 3029. www.shawnsswimschool.com.au. It was a 17mx6m pool and we opened in April 1994 with 40 students on the books. By the end of that year we were teaching 750 students.

Our popularity was mainly due to our innovative baby and pre-school program. By the end of 2004 we had 1300 students and it was time we built another pool on the block next door and in November 2005 we opened our new pool (25mx8m). As of December 2008 we are teaching approximately 2000 students a week, 500 of whom are 3 years or younger. I have been teaching babies for 16 years and still love it!

Professional Development:

I have attended WABC conferences in Melbourne, Oaxaca and Wellington, all of which I have found both enjoyable and educational, not to mention inspiring. In 2009 I will be presenting at the WABC Conference in Vancouver.

I have also attended the ASCTA and Swim Australia Conferences on the Gold Coast every year since 1998. I also regularly attend the Pre-school Aquatic workshops held by the Swim School Owners Association of Australia, having presented both theory and practical demonstrations. I have attended the Jeff Metzger "Boot Camp" in Port Douglas, organised by Swim Australia, along with some other swim school owners. I also attended Swim Australia's

inaugural International Swim Schools Conference that was held in Fiji in 2005 and 2009.

Business Achievements:

Shawn's Swim School was named the Victorian Aquatic Industry council "Swim school of the year" in 2003. We also won Wyndham City Council "Small business of the year" in 2006.

I have also been the Vice President of the Swim School Owners Association of Australia in 2006-2007

Our Innovative babies program:

Our babies program is the cornerstone of our swim school's success. All of our students that are under 2 and a half years old come to lessons twice a week. We believe that this program has aided us in achieving the superb results we get from our babies. That and our innovative program have lead to us be perceived as industry leaders in our region in pre-school aquatics . We are regularly being contacted by teachers from other swim school schools, who have seen our presentations and witnessed first hand what our babies and pre-shoolers are able to achieve. They are always welcome to view our classes and we are very happy to share our methods with others.

Christopher Smith



Diploma of Education (Australian College of Physical Education)

Bachelor Human Movement (University Western Australia)

Bronze accredited Coach

Presenter of Swim Australia Teacher Courses

Registered Assessor with Austswim Teacher of Swimming & Water Safety

Presenter of the Austswim Infant and Preschool Aquatics certificate

Registered Assessor with Austswim Infant Preschool aquatics

Presenter 2005 Australasian-Oceania Swimming Professionals Convention

Presenter 2006 Australasian-Oceania Swimming Professionals Convention

Presenter 2007 Australasian-Oceania Swimming Professionals Convention

Presenter of Swim Australia's 2006 "Spring into Summer Tour"

Presenter 2007 Austswim Metropolitan Aquatic Conference

Presenter 2007 Austswim Regional Conference

Presenter 2008 Swim Australia Tour; Australian Institute of Sport

Produced a DVD series:

Aquababies Songs and Activities for Infant Aquatics

Aquatots Songs and Activities for Infant Aquatics

The effective use of swim platforms in Infant Aquatics

Paper published in 2005 Australasian-Oceania Swimming Professionals Convention Proceedings

Paper published in 2006 Australasian-Oceania Swimming Professionals Convention Proceedings Paper published in 2007 Austswim Metropolitan Conference notes

Paper published in 2007 Austswim Regional Conference notes

Contributed to Swim Australia's "Swim Tips"

Ongoing articles published in ASCTA's "Swimming in Australia".

Teacher of swimming Pat Taylor Swimming School, Sydney 1980 – 1986

Teacher of Swimming Bubbles Swimming School, Sydney 1982 - 2006

Co-owner of Freshwater Swim Centre, Freshwater Beach Sydney 1993 – 2003

Owner of Peninsula Swimming School with wife Naomi, Freshwater Beach Sydney 2003 – 2006

High Commendation for Education at 2001 NSW Water Safety Awards

Nominated for Outstanding Services to Water Safety 2001 NSW Water Safety Awards

Organised the television production Home Life Style Learn to Swim segment which won

Outstanding Community Service Award at the 2006 Swim Australia Awards

Review panel for the Swim Australia™ Teacher

Review panel for the Swim Australia™ Teacher of Babies and Toddlers

Naomi Smith



Naomi Smith holds a Bachelor of Education and a Graduate Diploma in Early Childhood Education.

Naomi was a member of the Physical Education staff at the Pymble Ladies College in Sydney before accepting a position as Head of Department at Mt St Benedict's College which saw Naomi in a teaching role for 10 years before joining her husband in owning the Peninsula Swimming School in Sydney.

Naomi is a regular contributor to Swim Australia articles and was a presenter for the Swim Australia National Seminar series in 2006.

Naomi's career objective is to endeavour to provide excellence in Physical Education and Early Childhood practices by providing innovative and creative teaching activities and strategies within a caring and understanding learning environment, ensuring every child's self-respect and true potential is met.

Naomi continues to share her knowledge and expertise in education pedagogy and teaching methodology with Swim Australia as a member of the Swim Australia™ Teacher of Babies and Toddlers review panel.

David Speechley F.R.L.S.S.A

Pool Plant Operations Program*

* = under a memorandum with other RTO's

David has been and is a member of numerous aquatic industry consultative groups at national and state levels and is a passionate advocate for the aquatic industry.

His breadth of experience in aquatics ranges across all facets of teaching, life saving, coaching, diving, masters and meet management and across all sports through advocacy with the Sport Federation.

He continually is at the coal face of the aquatics industry, presenting and developing courses and administrative systems whilst representing the views of the industry at every opportunity to government, allied organisations, aquatic managers and Australian and overseas swim schools

He passes on the knowledge he has gained over the years since first starting out peddling a push bike teaching swimming door to door in the early 1970's through regular articles and courses he writes and numerous presentations conducted around Australia and overseas.

Julie Speechley



Office and Accreditation Manager for the Australian Swimming Coaches and Teachers Association (ASCTA), a Registered Training Organisation (RTO), delivering quality education via certification and the issuing of competencies in areas related to:-

Teaching	Swimming and water safety Teaching Baby and Toddler Aquatics Adolescents and Adults Learners with Disability Competitive Swimming
Coaching	Bronze Licence Silver Licence Coaching Open Water Swimmers Coaching Swimmers with a Disability Level 1 Masters
Workplace Training* Assessment	TAE40104 Cert IV in Training and

Pool Plant Operations Program* * = under a memorandum with other RTO's

Julie worked in a library for many years, then the Racing industry and has worked since 1994 in the Aquatics Industry. She holds her:

Swim Australia™ Teacher

Swim Australia™ Teacher of Adolescents and Adults

BSZ40198 Certificate IV in Workplace Training and Assessment

Senior Resuscitation certificate

Julie is passionate about her job and the aquatics industry, particularly helping people become qualified to teach and coach swimming so that children are given opportunities to learn skills that will help them throughout their lives.

Julie loves working with professional organisations such as Swim Australia, ASCTA, Swimming Australia and the State Swimming Associations plus talking with Teachers and Coaches, whether it be by phone, internet or face to face so that the industry knows ASCTA always values their opinion.