I Swim, You Swim, We all swim differently: A Training Workshop for Swim Instructors

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By

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DEDICATION

This thesis project is dedicated to my best friend, confidant, sister-wife, Kristin Green. This journey began and continues on because of you. We have laughed and cried and conversed intently on this topic, in fact the same way we do about everything in our lives. It was your encouragement that led me to this field, your vision that prompted this project, your support that motivated me through it and your friendship that holds it all together. Thank you. Looking forward to many more years of swim lessons and life together!
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ABSTRACT

I Swim, You Swim, We all swim differently: A Training Workshop for Swim Instructors

By

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Master of Arts in Education

Educational Psychology

The U.S. Centers for Disease Control and Prevention stated that in 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008). Between 2005-2007 there were 385 pool or spa related deaths of children under fifteen years old; 84% occurred in residential locations and 77% of those deaths were of children under five years old (Gipson, 2010). This means that children under five years old are at risk of dying in their own backyard!

Moreover, the Centers for Disease Control (2012) state several factors for unintentional drowning, those pertaining to swimming pool drowning risks include, a lack of swimming ability, barriers to prevent unsupervised access to water and, most importantly, a lack of close supervision while swimming. Thus, The Centers for Disease Control (2012) recommend multilayered protective barriers to reduce the risk of drowning such as building fences around pools, installing alarms around nearby doors, as well as enrolling children in swim lessons.

In Thousand Oaks, California there are several swim programs that parents may choose from, each with their own philosophies, methods and trainings for their instructors. One of these programs is Santa Rosa Swimming owned by Kristin Green, an
energetic entrepreneur with a Masters Degree in Early Childhood Education from California State University, Northridge with an extensive background in swim coaching. She is also one of the current lead instructors along with the present researcher, Yvonne Boeing, who is working towards a Masters Degree in Early Child Education. After years of practice and education they have created a methodology that allows children to learn how to swim in a developmentally appropriate and fun way.

Today, the business is growing and there is a need to hire new instructors. Along with hiring new teachers, a training workshop is required to educate them on the philosophy and techniques that make Santa Rosa Swimming unique. Therefore, the purpose of this project was to create a training workshop that implemented what Kristin Green and this researcher had developed in recent years derived from their knowledge in early childhood development and swim skills. This graduate project details the development of a training workshop that orients instructors in Santa Rosa Swimming’s unique philosophy about how to effectively teach swimming to children, the child development research behind the methods, and key water safety skills to incorporate into their lesson.
“We’ve tried everything! This is our last try before we give up. He doesn’t even put his feet in the water!” said the exasperated mother of a frightened 4 year-old boy to me. I looked up from my position in the pool at a little boy looking down at his feet dreading what was to come. I also noticed that he was wearing a Buzz Lightyear rash guard and swim trunks, clearly a fan. (Buzz Lightyear is a fictional character from a children’s movie called Toy Story). I got out of the pool sat on the steps and put my feet back in the water. I motioned for the little boy to sit next to me. He sat, but not right next to me and definitely not near the pool. “Hi,” I whispered. He looked up at me then back down at his hands... “Hi,” he whispered back. “Guess what? I think Buzz is pretty cool but Woody is waaaay better” I explained. He looked up at me with an incredulous look on his little face and said, “No way! Buzz rules!” We spent the next 2 minutes discussing the pros and cons of Buzz Lightyear. By this point the little boy was sitting right next to me, only inches from the pool. We finally agreed that Buzz rules and in our discussion we uncovered that Buzz has new adventures all the time. So that’s exactly what we set out to do for the remainder of our time together! I was Woody, he was Buzz and we explored the shallow shelf of the swimming pool “listening” to the coordinates the water was whispering to us, so quietly we actually had to touch the water with our ears! We scaled the walls to different locations (steps) all over the pool. By the end of 20 minutes, the frightened little boy was no longer scared, but angry that the “fun” was over and asked when would we “play” again. In the fun and games he did not notice that his mother had tears in her eyes because her son was completely wet, save for his face, and that he had just completed his first swim lesson!

Introduction

Swimming, especially in fair weather beach states like California, may be a recreational activity for many families during the summer and even year round in residential pools. Although swimming is a fun, playful activity it can be lethal. The U.S. Centers for Disease Control and Prevention stated that in 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008). Between 2005-2007 there were 385 pool or spa related deaths of children under fifteen years old; 84% occurred in residential locations and 77% of those deaths were of children under five
years old (Gipson, 2010). This means that children under five years old are at risk of dying in their own backyard! Thus, the importance of water safety cannot be underestimated. The CDC (2012) offers several tips on how to decrease the staggering drowning statistics including fencing pools, ensuring that there is adult supervision, acquiring CPR certification, and enrolling children in swim lessons.

Local Swim Lesson Programs

Not only will learning to swim likely increase children’s enjoyment of swimming in the water, but learning how to swim may also enhance children’s sense of confidence and competence around water, thus potentially lowering their risk of drowning. Enrolling children, even as young infants in swim lessons is one way for parents to increase children’s water safety skills. In Thousand Oaks, California there are several swim programs that parents may choose from, each with their own philosophies, methods and trainings for their instructors. For example, the local parks and recreation centers as well as YMCA programs offer swimming instruction for young children. These programs have prescriptive skill sets that are used to teach children to swim; one set of skills needs to be mastered before moving to another set of skills. Typically these lessons last between 20-30 minutes and are usually in groups anywhere from 3-5 children.

Another local swim instruction program is Daland Swim School, according to their website (Dalandswim.com); their philosophy is to develop “students of all ages into safe, confident and happy swimmers for life” (para. 5). Their instructors are certified through Daland’s “rigorous training program” (par. 3), though no specific details of the training are given. Daland, like YMCA, follows prescriptive skill sets but does offer more
one-on-one instruction and smaller group lessons. Both the YMCA and Daland Swim School are local swimming pool facilities with mass quantity clientele.

Two other more private swim programs in the Conejo Valley, although vastly different, are Infant Swim Resource and Santa Rosa Swimming. Infant Swim Resource’s (ISR) sole purpose is to teach children to float should they ever fall into a pool; however, it does force the child into a survival pose through repetition and muscle memory rather than a conscious retention of a skill. According to ISR’s website (Infantswim.com), their philosophy is “Not one more child drowns” (para. 1), with instructors that are “highly trained and certified to teach ISR’s Self Rescue method” (para.5). ISR’s lessons are usually one-on-one for 10 minutes, five times a week, taking anywhere from 8-12 weeks for children to become “successful” at floating on their own. The lessons are usually in either the clients or the instructor’s backyard pool. Unlike Daland Swim School and the YMCA, the ISR program does not teach a progressive prescriptive skill set that leads to other swimming skills.

Finally, there is Santa Rosa Swimming owned by Kristin Green, an energetic entrepreneur with a Masters Degree in Early Childhood Education from California State University, Northridge with an extensive background in swim coaching. As a mother of two young children she knows the importance of water safety and recognized that teaching swimming can be approached like classroom teaching, utilizing a developmentally appropriate teaching philosophy. Santa Rosa swimming is run from Kristin’s backyard salt water heated pool were the goal is to teach children not only water safety skills, but also a lifelong appreciation for the numerous benefits of swimming. Most importantly, Santa Rosa Swimming believes in a patient, gentle, and fun approach
to reaching these goals. The program offers one group lesson, a Parent Tot class designed
to exposed infants as young as six months to the water as well as a bonding experience
for the parent and child. All other lessons are 20-30 minutes long, one-on-one with a
swim instructor. The program does not have a prescriptive skill set that is taught to
children - all children are guided through their lessons at their own pace and in their own
comfort zone. Therefore, unlike the previously described programs, children do not have
to learn the skills in a set sequence.

All of these programs have websites, some more user friendly than others where
parents can research the programs and find what best suits their needs. In looking for the
adequate program certain factors can deter or persuade a parent’s decision. Factors such
as cost, distance, and availability are important considerations when choosing a swim
program. Of equal or more importance are the program philosophy and the swim
instructor’s qualifications. Parents need to understand there is a difference in quality
between someone trained to teach a set of swim skills and someone trained to understand
a child’s development and teach that particular child how to swim.

**Statement of the Problem**

The current lead instructors at Santa Rosa Swimming are Kristin Green (Masters
Degree in Early Child Education) and the researcher of this project, Yvonne Boeing who
is working towards a Masters Degree in Early Child Education. After years of practice
and education they have created a methodology that allows for children to learn how to
swim in a developmentally appropriate and fun way. Today, the business is growing and
there is a need to hire new instructors. Along with hiring new teachers, there is a need for
a training workshop that educates them on the philosophy and techniques that make Santa Rosa Swimming unique. Therefore, this graduate project details the development of a training workshop that orients instructors to with Santa Rosa Swimming’s unique philosophy about how to effectively teach swimming to children, the child development research behind the methods, and key water safety skills to incorporate into their lessons.

**Purpose of the Graduate Project**

Anyone who knows how to swim or has been on a swim team can teach a few basic swim skills. Typically, instructors teach how they were coached. What makes Santa Rosa Swimming different than other local programs? The quality of the lessons! Each lesson is tailored to the individual child and family. There is not a prescribed set of lessons that are followed, but rather the child’s development and motivation guide the swim lesson. For example, a 3-year-old boy may be very motivated by pushing a car around on the ledges or stairs of his home, the instructor can then take that play activity and design the lesson around the knowledge that children learn best through play.

Another important factor that differentiates the instructors at Santa Rosa Swimming from other local swim programs is the dedication to parent education. For example, whether it is to comfort their child or just join in the fun, in some cases parents choose to participate in the lesson in either case the instructors explains and demonstrates activities and skills parents can practice with their children in their own time.

At Santa Rosa Swimming there is no coaching, but *teaching*, and not just anyone, but *children*. Knowing how to swim and how to teach children how to swim are two different skill sets. The last two summers, this study’s investigator, Yvonne, has briefly
trained new instructors individually and been available answer questions whenever possible; however, doing so has sometimes interfered with a lesson or the need for an example was necessary but not available. Therefore, the purpose of this Graduate Project is to create a workshop where future instructors of Santa Rosa Swimming can learn the philosophy and be trained to use child inspired swim skill techniques developed by Yvonne and Kristin.

The workshop will include 9 water safety skill sets (3 for beginning swimmers, 3 for intermediate swimmers and 3 for advanced swimmers) derived from the research supporting the importance of learning through play, child motivation, temperament and goodness of fit. The goal of the workshop is for new instructors to incorporate the philosophy and water safety skill sets into the methods they use when teaching children to swim.

**Terminology**

Swimming: defined as the “ability to move in the water by using the limbs of the body as well as the ability to float on the surface of water” (Dictionary.com, 2012, para. 1)

Age-determined: is identified as behaviors that are strictly correlated to age, in other words given a child’s age, one can accurately identify what that child should know and do.

Age-related: behaviors that are influenced by variables such as genetics and experiences; therefore, there is a larger window for expected behaviors in children given their prior experiences.
Maturation: “assumes that all behavior, including aquatic skills, change over time in a regular, ordered pattern as a result of internal, hereditary-based processes mainly dependent upon a person’s chronological age” (ACFASP, 2009, p. 1).

Learning: “presumes that behavioral changes primarily depend upon specific environmental experiences or sometimes the interaction of those experiences with age” (ACFASP, 2009, p. 1).

Dynamical Systems “sees behavioral change as possessing inherent, emerging characteristics strongly associated with the elements of complex systems as well as dynamic, physical and psychological principles” (ACFASP, 2009, p. 1).

Reflexes: are “automatic, stereotyped movements, directed from the brain stem and executed without cortical involvement” (Goddard, 2005, p. 1).

Developmentally Appropriate: is “practice that promotes young children’s optimal learning and development” (NAEYC, 2009, p. 16).

Temperament: is the “biologically rooted individual differences in behavioral tendencies that are relatively stable across various kinds of situations and over the course of time” (Peico & Reed-Vitor, 2003, p. 3).

Play: is a “minimally-scripted, open ended exploration in which the participant is absorbed in the spontaneity of the experience” (Ortlieb, 2010, p. 241).

Andragogy: is “the art and science of helping adults learn, in contrast to pedagogy as the art and science of teaching children” (Knowles, 1970, p. 43).
Preview of the Graduate Project

The next chapter reviews the literature on research regarding child development, swim lessons and best learning practices for both adults and children – change to reflect organization of chapter. It will also include the importance of child motivation and play.

In Chapter Three, the conception and development of the training workshop, the development and implementation of surveys to assess what the instructors knew before and after about developmentally appropriate swim lessons will be described. In Chapter Four a description of the actual workshop as well as well as the survey results will be provided.
CHAPTER TWO

LITERATURE REVIEW

Introduction

Given the purpose of this project, to develop a training workshop for Santa Rosa Swimming instructors, this chapter presents literature that supports and explains its goals. The present discussion of literature contains two areas of focus. The first area of focus is on the importance of swim lessons and the relevant research that supports this statement.

The second area of focus identifies how children learn best described by research on child motivation, temperament and most importantly, play. Because there is limited research that investigates the importance of developmentally appropriate swim lessons, research on best teaching practices that can be transposed from the classroom into a swimming environment is examined. Both areas of focus are central pieces to the development of this project as the purpose is to train instructors in better understanding child development and ways to individualize lessons to better instruct each child.

Swim Lessons

“That’s not swimming she’s just floating!”

-Mother of 20-month-old child

As a preface to the review of literature about swim lessons, it is important to define what is considered swimming. In fact, according to Dictionary.com (2012) swim is defined as the “ability to move in the water by using the limbs of the body as well as the ability to float on the surface of water”. Therefore, for the purpose of this study,
swimming will be the ability to do both – maneuver through a body of water, as well as being able to float.

**Brief History of Swimming**

In examining the available literature on swimming lessons there is no dated record of whom and specifically when swimming was invented; however, cave wall paintings depict the origin of swimming in prehistoric times (Historyofswimming.net, 2009). It is assumed that the first swimmer probably observed animals swim and copied the movement in what is known today as the doggy paddle, a primitive swimming stroke where the body is in a prone position, the head is kept out of the water, the arms are submerged and alternately thrust forward and pull back simultaneously while the legs kick (Dictionary.com, 2012).

Furthermore, according to History of Swimming (2009), by 3,000 BC the Egyptians progressed from the doggy paddle to the front crawl, a swimming stroke that is synonymous to the freestyle stroke where the head is submerged, the arms move alternatively and the legs flutter kick (Dictionary.com, 2012). It is also postulated (Historyofswimming.net, 2009), that the Egyptians developed the breaststroke, a swimming stroke where the body is in a prone position, both arms move simultaneously forward, around in a circle and back to the forward position in front of the chest while the legs move in a frog-like kick (Dictionary.com. 2012). For the purpose of this project only these two strokes will be described as they are the first two swimming strokes as well as back floats that are introduced to swimmers at Santa Rosa Swimming.
Drowning and Prevention

The prehistoric man may have intentionally swum across a body of water to follow his dinner, or maybe he fell into the water and had to somehow maneuver his body by mimicking other animals to get to shore. Regardless of the reason, the prehistoric man needed to survive and swimming was a requirement. Today, learning to swim may not be as “do or die” as it was prehistoric times, yet drowning injuries and deaths are stark reality of today and learning to swim is the best way to prevent such incidences. In fact, with more than 8.8 million residential and public-use swimming pools in the United States (CDC, 2010) there is a high risk of drowning.

As stated earlier, The U.S. Centers for Disease Control and Prevention stated that in 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008). During 2005-2007, 84% of pool or spa related deaths occurred in residential locations and 77% of those deaths were of children under five years old (Gipson, 2010). In other words, the leading cause of death in children between 1-4 years old occurs in their own backyards!

Moreover, the Centers for Disease Control (2012) state several factors for unintentional drowning, those pertaining to swimming pool drowning risks include a lack of swimming ability or barriers to prevent unsupervised access to water and, most importantly, a lack of close supervision while swimming. Thus, the U.S. Consumer Product Safety Commission (2002) and the Centers for Disease Control (2012) recommend multilayered protective barriers to reduce the risk of drowning such as building fences around pools, installing alarms around nearby doors, as well as enrolling children in swim lessons.
However, according to The U.S. Consumer Product Safety Commission (2002), the Centers for Disease Control (2012), and the American Academy of Pediatrics (2003) there is no such thing as a “drown proof” child even if they are enrolled in swim lessons. There is nothing that reduces the risk of a child drowning more than vigilant adult supervision and should be understood as an integral part of this project.

**Minimum Age for Swim Lessons**

According to the American Red Cross Advisory Council on First Aid, Aquatics, Safety and Preparedness’ (ACFASP) Scientific Review on the Minimum Age for Swimming Lessons (2009), both aquatic and medical fields have argued over the optimal age at which aquatic skills should be introduced within formal swim lessons. The ACFASP (2009) further explained that this controversy derives from the underlying purpose of why swim lessons are offered as well as conflicting theoretical perspectives about how aquatic skills are learned.

In an attempt to untangle this argument Roberton and Halverson’s (1984) conceptual developmental perspective that age insufficiently substitutes for other “specific causal variables that change over time” (as cited in ACFASP, 2009, p. 4) should be considered. They describe the difference between “age determined” and “age related” concepts of skill acquisition (as cited in ACFASP, 2009, p. 4). “Age-determined” is identified as behaviors that are strictly correlated to age, in other words given a child’s age, one can accurately identify what that child should know and do. For example, this perspective claims that infants are normally expected to walk between 12-13 months of
age (American Academy of Pediatrics, 2009). This perspective ignores the existence of variability in the acquisition of skills and behaviors.

In contrast, the “age-related” concept understands that behaviors are influenced by variables such as genetics and experiences; therefore, there is a larger window for expected behaviors in children given their prior experiences. To illustrate, the “normal” age for an infant to walk may have a “90% confidence interval of 9-18 months around a mean of approximately 13 months” (American Academy of Pediatrics, 2009, p.4). These perspectives are important to note as they may influence statements concerning the minimum age required for swim lessons.

**Purposes of swim lessons.** According to the ACFASP (2009), there are at least four purposes that exist in aquatic programs for infants and children that include: (a) a “drown proofing” skills program; (b) an aquatic readiness skills program for future learning; (c) a precocious acquisition of skills for competitive swimming development; (d) and a therapeutic environment. It is statements such as “drown proofing” a child that cause concern and controversy in the medical and aquatic fields as it leads to parents developing a false sense of security (American Academy of Pediatrics, 2012). Hence, the American Academy of Pediatrics has issued several policy statements regarding infant swimming and caution against formal swim lessons due to “general developmental limitations” (ACFASP, 2009, p.2) until the child is four years old.

**Theoretical perspectives.** The ACFASP (2009) states there are three main yet conflicting theoretical perspectives that are applied when children should begin to learn to swim: maturation, learning, and dynamical systems. Maturation “assumes that all behavior, including aquatic skills, change over time in a regular, ordered pattern as a
result of internal, hereditary-based processes mainly dependent upon a person’s chronological age” (ACFASP, 2009, p. 1); in other words, as a person matures so does his/her behavior or skills, including aquatic skills. For example, a ten year old boy will be able to do swim strokes that he may not have been able to do when he was four years old.

Learning “presumes that behavioral changes primarily depend upon specific environmental experiences or sometimes the interaction of those experiences with age” (ACFASP, 2009, p.1). That is to say, a person’s behavior changes given his/her experiences. Taking the same example from above, if the ten year old had never been exposed to a pool he would not be as proficient in the water as a four year old that had lessons and spent several hours a day swimming.

Finally, dynamical systems “sees behavioral change as possessing inherent, emerging characteristics strongly associated with the elements of complex systems as well as dynamic, physical and psychological principles” (ACFASP, 2009, p.1). Therefore, a person’s behavior has several dynamic influences that cause it to change. Going back to the example from above, the 10 year old may have never been exposed to the water but somehow he is a “natural” once he enters the pool, whereas the four year old was hesitant and it took several tries before he became comfortable in the pool.

These theories are important in understanding why there has been such controversy over the minimum age a child can start formal, or structured, swim lessons because aquatic programs, whether “indirectly or subtly influenced by theory” (ACFASP, 2009, p.1) are shaped by different purposes and offer different results.

**Recommendation.** In light of relevant statistics that the leading cause of unintentional deaths in children under four was drowning as well as relevant research that
revealed swim instruction for children under 4 years old may reduce the risk of drowning, the American Academy of Pediatrics has relaxed its policy regarding the age at which children should start learning water-safety skills (American Academy of Pediatrics, 2010). According to the AAP, evidence no longer supports an “advisory against early aquatic experience and swim lessons for children of any specific age” (American Academy of Pediatrics, p. 259, 2010).

Moreover, there is no supportive evidence that all children under 4 years old should start swim lessons (American Academy of Pediatrics, 2010). In other words, children under four years old can start swim lessons for the purpose of building aquatic readiness and water acclimation on an individual basis (American Academy of Pediatrics, 2010).

The Infant Swimmer

Although structured swim instruction for infants may not result in formal acquisition swimming skills, the ACFASP (2009) does state that there is “research evidence that individual infants and young children are capable of gradually acquiring developmentally primitive, but voluntary, aquatic behaviors at young ages” (p. 2). McGraw (1939) researched the swimming behavior of infants and discovered that infant aquatic behaviors progressed from “reflexive swimming” and “disorganized phase” in the first year and led up to “voluntary swimming” during the second year of life given regular exposure to water (p. 486). In other words the infant child can experience the water early in life given his/her innate swimming reflex, yet like other reflexes must be inhibited so that the child can actively control his/her motions in the water. Other
researchers such as Erbaugh (1978, 1986) as well as Asher and colleges (1995) agree that selected water safety experiences in early childhood play a role in promoting drowning reduction. This is in part due to early exposure and education in what is appropriate behavior around a body of water.

This concept is explained as follows:

Jason’s parents did a parent and tot swim lessons with him simply to expose him to the water. By two years old, Jason had rudimentary swim strokes and enjoyed summers in his backyard pool. His parents took other protective measures around their home pool such as fences and alarms but they were adamant about teaching Jason appropriate behavior around pools. Much like teaching him not climb on tables or touch a hot oven, they taught Jason that the pool was only accessible if mommy or daddy went with him. After practice and repetition, Jason would reach for his parent’s hands and point to the pool whenever he wanted to go swimming. In other words simply exposing children to water early on sets a foundation that can then develop into education not just for how to swim but how to prevent any accidents.

Ultimately, with the knowledge that there is no such thing as “drown proofing” a child, the minimum age for a child to begin swim lessons is determined by the parent’s decision based on individualized factors (American Academy of Pediatrics, 2010). Some may want to expose their children early on simply to enjoy a backyard pool together as a family.
Reflexes and Swimming

As McGraw (1939) identified, an infant has a “reflexive” swimming behavior that over time with practice can be a “voluntary” behavior (p. 486). According to Goddard (2005), reflexes are “automatic, stereotyped movements, directed from the brain stem and executed without cortical involvement” (p.1). These movements are set in place to insure immediate response in the infant’s new environment as well as training for many later voluntary skills. These reflexes should have a limited lifespan as they should be controlled by higher centers of the brain as the infant matures (Goddard, 2005). For example, an infant will reflexively respond to being startled by crying whereas an older child will process the same stimulus in the higher centers of the brain and have control of his/her reaction. If a child retains any reflexes the development of swimming skills may be impeded (Thomson, et.al, 2010). The following descriptions will further explain how retained reflexes impede said development.

For the purpose of this study, instructors should have a brief understanding of these reflexes and their relation to swimming skills acquisition. Understanding and recognizing any retained reflexes is essential for learning and teaching swimming skills at any age because this is the first building block in assessing what and how skills should be introduced. Therefore, many of the basic reflexes are explained to follow.

Moro Reflex. Also known as the startle reflex, the Moro reflex is activated by stimulation to one or more of the senses (Thomson, et.al, 2010). According to Goddard (2005), it is like an “emergency trip-switch” and is the earliest form of “fight or flight” response (p. 5). A retained Moro reflex (past 2-4 months) can affect balance, coordination and breathing (Thomson, et.al, 2010). The child may retain an “exaggerated
startle reaction which can cause hypersensitivity in several of his/her sensory systems” (Whitehead, 2010). The swimming skill implications of a retained Moro reflex include overwhelming stimuli for the infant in the water (Thomson, et.al, 2010). The infant may also have difficulty being touched or guided through the water causing a fearful swimming experience (Thomson, et.al, 2010).

**Asymmetrical Tonic Neck Reflex (ATNR).** Movement of the infant’s head to one side will elicit reflexive extension of the arm, hand and fingers to the side the head is turned while the arm and leg of the opposite side bend (Goddard, 2005; Thomson, et.al 2010). It is the first component of eye-hand coordination, facilitates movement, develops muscle tone and provides vestibular stimulation (Goddard, 2005). A child that retains ATNR past six months will not be able to crawl on his/her stomach in a cross patterning movement, impairs the infant’s bilateral integration (Goddard, 2005; Whitehead, 2010). The swimming skills implications of a retained ATNR include the inability of a child to cross the midline when doing arm strokes. Head movement may also be impaired when the child moves with the arm stroke rather than opposite for side breathing (Thomson, et.al, 2010).

**Tonic Labyrinthine Reflex (TLR).** There are two Tonic Labyrinthine Reflex TLRs, prone and supine (Whitehead, 2010). They are triggered by the positioning of the head in relation to gravity. When a baby is placed in a prone position, or on his stomach, his torso, limbs and head are pulled forward towards the ground. This is opposite when the baby is placed on his back or supine position – his legs stiffen and his arms bend at the elbows (Whitehead, 2010). This reflex is set in place as a primitive response to gravity (Goddard, 2005). The supine TLR should be developed by 4 months of age while
the prone TLR could take up to three years (Goddard, 2005). The swimming skills implications of a retained TLR include a child’s ability to lift his head up to breathe or holding the head in line with the body when floating (Whitehead, 2010).

**Symmetrical Tonic Neck Reflex (STNR).** According to Whitehead (2010), the Symmetrical Tonic Neck Reflex (STNR) helps transition an infant into the crawling position. Goddard (2005), states that the STNR is present for a short period of time after birth and returns between 8-11 months. It enables the extension of the arms and flexion of the knees at the same time and must be developed before a child can crawl as the infant is at the “mercy of his head movement, (the head) dictates the position of his arms and legs and inhibits his effective forward movement” (Whitehead, 2010, p. 17). Thomson, et.al (2010) states that the swimming skills implication of a retained STNR past eleven months includes difficulties in arm strokes as the head influences the arms to hold the same position.

**Palmar Grasp Reflex.** According to Goddard (2005), the Palmar Grasp Reflex movement is a reflexive closure of the hand in response to a light touch to the palm (Goddard, 2005). It is believed that this reflex is a continuation of human evolution when it was necessary for an infant to cling to his mother for safety (Goddard, 2005). If the palmar grasp reflex is retained past six months of age the child cannot progress through the stages of release and finger mobility (Goddard, 2005). Whitehead (2010) states that the swimming skill implications of a retained palmar grasp reflex includes keeping hands wide open when stroking the water, which is ineffective in pulling the body across the water as there is no resistance against the stroke.
**Plantar and Babinski.** The Plantar reflex is the involuntary movement of the toes as they curl downward with pressure on the ball of the foot, while the Babinski reflex causes the toes to fan out with pressure on the side of the foot (Thomson, et al., 2005). The implication of this for the acquisition of swimming skills include oversensitive feet while being held to demonstrate proper kicking movement and a limited freedom of ankle movement while learning to kick (Thomson, et al., 2005).

**Protective Laryngeal Reflex.** The Protective Laryngeal Reflex, also known as the “gag reflex” is where the epiglottis closes over the larynx when water is accidentally drawn into the child’s mouth (Whitehead, 2010). This reflex forces the glottis to close and preventing water inhalation into the lungs and why children are sometime photographed with open mouths underwater, but never swallow the water.

**Best Teaching Practices**

“I don’t want him to ‘splish and splash, ’ I want him to learn how to swim.”

–Mother of 3-year old.

The severity of child drowning and the need for protective barriers, in this case swim lessons, is only a portion of drowning prevention. Children may be enrolled in swim lessons but if they do not retain the information taught due to inefficient teaching practices they may not know what to do should they accidentally fall into a pool. Additionally, if children are taught skills prior to developmental readiness and/or are taught skills in a manner that is not developmentally appropriate, children may later associate potentially negative learning experiences with swimming, which in turn may result in long term aversion to or fear of water. Therefore, it is crucial for instructors to
know certain aspects of child development that pertain to water and safety skill acquisition through best teaching practices in order to truly reduce children’s drowning risk. Accordingly, this section will address different approaches to swim lessons, an explanation of developmentally appropriate practices and principles including play and temperament, and finally how to teach adults these concepts.

**Approaches to Teaching Swimming**

What is the best way for a child to learn how to swim? According to Reiser (n.d), there are three approaches to swim lessons: Water Acclimation Approach, Forceful Skill-Centered Approach and Progressive Child-Centered Approach. To explain, a Water Acclimation Approach is simply to have the child enjoy the water. There are minimal advancements in skill acquisition, yet is a positive way to introduction children to the water. An example of this approach is the Santa Rosa Swimming Parent Tot Program. Although there are a few skills taught to the parents, such as how to properly hold an infant in the water, or conditioning the child to listen for the “1,2,3 inhale” command before submerging in the water, the lessons are geared towards introducing the child to the water in a fun and gentle manner.

In a Forceful, Skill-centered Approach, Reiser (n.d) describes that the instructor is the center of the swim lessons and sets out to instruct a certain amount of skills in the given time with “little or no regard to the child’s readiness or happiness” (para. 7). Additionally, this type of instruction, even though it may result in the acquisition of water skills, can also be the most damaging for young children’s self esteem. As Santa Rosa Swimming does not use this approach, but the instructors have heard parents use terms
such as “The swim Nazi” or “forceful and harsh” when referring to prior swimming experiences.

The Progressive, Child-centered Approach is described as gentle; with the child’s happiness is the priority. Reiser (n.d) explains that the purpose of these types of lessons is to produce healthy, positive first time experiences as the primary objective while learning and skill progression is secondary. Santa Rosa Swimming’s philosophy and approach is child-paced and child focused.

Reiser (n.d) further states that it is critical for parents and teachers to understand that the Forceful, Skill-centered approach creates not only a negative experience, but can also hinder a child’s self esteem, and may cause young children to avoid or fear swim lessons. As a result, children may lose the possibility of having another protective barrier against drowning risk. Parents and teachers should understand that swimming skills can be learned while using a loving, child-centered approach. The difference is the child is learning at the child's pace not an adult’s. This approach coincides with the National Association for the Education of Young Children’s (NAEYC) Position Statement on Developmentally Appropriate in Early Childhood Programs Serving Children from Birth through Age 8.

Developmentally Appropriate

In order to continue the literature review on practices that best serve instructors the pool setting, a brief explanation of what NAEYC constitutes as developmentally appropriate is needed. In 2009, NAEYC adopted a policy statement based on theory and literature about how children learn, including principles of child development that inform
practice. Each principle describes an individually contributing factor. According to this NAEYC (2009) statement, developmentally appropriate is “practice that promotes young children’s optimal learning and development” (p. 16).

Although all developmentally appropriate principles can be applied to the purpose of this project, the policies that are most pertinent are Principle 4: “Development and learning result from a dynamic and continuous interaction of biological maturation and experience” (NAEYC, 2009, p. 12); Principle 7: “Children develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers” (NAEYC, 2009, p.13); and Principle 10: Play is an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence (NAEYC, 2009). These are described in further detail to follow.

**Interaction of biological maturation and experience.** According to NAEYC (2009), Development is “the result of the interplay between the growing, changing child and the child’s experiences in the social and physical worlds” (p. 12). For example, a child may be predisposed to healthy growth given his genetic makeup, but lack of proper nutrition could inhibit the full growth potential. A child’s temperament is also influenced and influences the interactions she has between peers and adults. Therefore, it is important for early childhood educators to maintain high expectations and utilize all their knowledge, creativity, and determination to find ways to help every child succeed.

**Relationships.** According to NAEYC (2009), key concepts of children’s development such as empathy and cooperation, self-regulation and language develops from nurturing relationships with responsive adults. The first and most important relationships are the ones a child forms with parents or other primary caregivers. Forming
one or more of these primary relationships sets the stage for others, as children move into the wider world beyond their immediate family. Therefore, positive teacher-child relationships promote children’s learning and achievement, as well as social competence and emotional development. NAEYC (2009) further states that nurturing relationships are crucial in fostering high self-esteem and a strong sense of self-efficacy, and the sociability to connect with others as well as form friendships. In other words, forming strong relationships in early childhood is the foundation for wholly development adults.

**Play and development.** NAEYC (2009) states that “Children of all ages love to play, and it gives them opportunities to develop physical competence and enjoyment of the outdoors, understand and make sense of their world, interact with others, express and control emotions, develop their symbolic and problem-solving abilities, and practice emerging skills” (p.14). This is based on a plethora of research that demonstrates the links between play and foundational abilities such as memory, self-regulation, oral language skills, social development and success in school.

Furthermore NAEYC (2009) describes children’s various kinds of play, including physical play, constructive play, pretend play, object play, and games with rules. Play is observed in all young animals and each kind of play has its own benefits and characteristics. Around 2 years of age, children begin to demonstrate symbolic use of objects, for instance, picking up a stick and pretending it is a sword. Later children begin to engage in more mature forms of dramatic play, between the ages of 3-5 they may act out specific roles; the sword from the previous example is now part of knight’s armor in a game. Such play is influential in developing self-regulation, as children are highly motivated to stick to the roles and rules of the play, and thus grow in the ability to inhibit
their impulses, act in coordination with others, and make plans. Unfortunately, due to adult-directed activities and media use, child play characterized by imagination and rich social interactions seem to be declining (NAEYC, 2009).

Adults can support children in make-believe play and games rather than detracting from academic learning, play appears “to support the abilities that underlie such learning and thus to promote school success” (NAEYC, 2009, p. 15). Now that principles regarding developmentally appropriate practices have been briefly examined, further details on key concepts will be described such as temperament, play

Temperament

According to Peico and Reed-Vitor (2003), temperament is the “biologically rooted individual differences in behavioral tendencies that are relatively stable across various kinds of situations and over the course of time” (p. 3). It is important to note that no particular temperament is good or bad, rather one’s temperament impacts adjustment to environments, in this case water (Peico & Reed-Victor, 2003). Also, one’s temperament can differ according to an environment. Keogh (2003) describes temperament as “easy” or adaptable if they have a positive mood, moderate intensity, interested in novelty, social and friendly. A difficult temperament is characterized by a child that usually has a negative mood, is intense, low in adaptability and withdraws in new situations (Keogh, 2003). Children who are slow to warm are initially shy in new situations, they are moderate in intensity but with time and when comfortable they have a positive mood, are responsive and sociable (Keogh, 2003).
Children’s temperaments have also been explained as dramatic (big highs and big lows) or mellow (quiet and express mildly). It is important to note that communication signals are harder to read from mellow tempered children (Peico & Reed-Victor, 2003). The goal for understanding children’s temperament is “goodness of fit; when the child’s temperament and the environmental demands and expectations are in accord” (Peico & Reed-Victor, 2003, p.7). For example, swim instructors can work toward increasing goodness of fit by making simple changes within the environment or swim lessons so the child can learn more effectively. If a child is slow to warm an instructor could spend the first part of the swim lesson out of the pool asking questions about the child’s interests, giving the child time to warm up to the new environment and the new instructor.

**Play**

Children’s play may often be dismissed as a simple and entertaining form of interaction with the single purpose of allowing children a “break” in their scholastic schedule, even after the abundant literature on the importance of play and its role on child development. Almost every leading theorist or scientist in early childhood education and development, such as Piaget and Vigotsky, agree upon the importance of play in a child’s development (Kavanaugh, 2006).

According to Ortlieb (2010), play is a “minimally-scripted, open ended exploration in which the participant is absorbed in the spontaneity of the experience” (p. 241). Play facilitates a child’s development by building on knowledge the child may already have (Wayne, 2010) and it enhances learning through comprehension, attention span, curiosity, empathy, concentration and group participation (Bodrova & Leong, 2003).
This concept can be exemplified in a swim lesson setting as such:

Jack is four years old and has a swimming pool at home. He has previous knowledge of how the water feels and moves yet has never submerged his head. During a swim lesson the instructor, after speaking with Jack’s parents to find out more about his interests and water experience, the instructor found out that Jack likes pirates and offers to play a game of submarine with him and explains, “Ok Captain, we’re going below sea! Gear ready? Check! Masks on? Check!”

With this knowledge of Jack’s interests, the instructor was able to engage him in a meaningful activity and participated in play with him while also teaching him breath control. In other words, while the instructor does have an agenda of what skills need to be taught, the results are almost a side effect to the primary action of playing.

Through play, knowledge can become a relationship between the child and his/her world (Samuelson & Carlsson, 2008) and because a child is actively involved during play, building on prior knowledge as well as controlling his/her environment, he or she remembers the information gathered better than information simply given to them (Drew, Christie, Johnson, Meckley & Neil, 2008). Using the same example as above, the instructor can ask Jack: “How many feet below sea will we be going Captain?” She demonstrates half an inch with her thumb and index finger “this many?” she then demonstrates three inches with her fingers “or this many?” This allows for Jack to have control of the submarine game, keeping him actively engaged in the lesson.

Above all play must include some element of fun in addition to being internally motivating (Wayne, 2010). Play may be a way to encourage the child to trust the
instructor and establish a relationship, another important component to developmentally appropriate swim lessons.

**Teacher instruction.** The final piece to understanding developmentally appropriate practices is the role of the teacher or for the purpose of this project, the instructor, and what is expected as educators. According to NAEYC (2009), teachers who have studied child development as well as effective ways of teaching are more likely to understand what is and is not good practice given the child’s age. It is teachers who are also in the classroom day in and day out learning each child’s temperaments, interests, learning habits that allow them to determine the best way to teach children both individually and in group settings (NAEYC, 2009). This concept can be implemented in a pool environment; it is attentive instructors that seek to understand each individual child, that have success in their lessons.

NAEYC (2009) has also established guidelines that address decisions early childhood professionals, such as teachers and in this case instructors, need to consider in developmentally appropriate practices. In developmentally appropriate practices, whether adult- or child-guided as explained earlier, the teacher is who takes responsibility for “stimulating, directing, and supporting children’s development and learning by providing the experiences that each child needs” (p.17). For example teachers are responsible for establishing positive, personal relationship.

Through an extensive repertoire of skills and strategies teachers know how and when to choose among them, to effectively promote each child’s learning and development at that moment. Those skills include the ability to adapt curriculum, activities, and materials to ensure full participation of *all* children (NAEYC, 2009).
Those strategies “include, but are not limited to, acknowledging, encouraging, giving specific feedback, modeling, demonstrating, adding challenge, giving cues or other assistance, providing information, and giving direction” (p. 18). This can also be considered expert decision making which means that teachers need solid professional preparation, as well as ongoing professional development (NAEYC, 2009).

**Teaching the teacher.** The final piece of this review of literature is how to teach adults, especially given that the purpose of this project is to train adult instructors. According to Knowles (1970), during the 1920’s, education began to systematically become more organized and teachers of adults were experiencing problems with the pedagogical model. One problem was that “pedagogy was premised on a conception of the purpose of education, namely the transmittal of knowledge and skills that had stood the test of time, that adult learners seemed to sense was insufficient” (Knowles, 1970, p. 40).

Knowles (1970) further explains that between 1929 and 1948 a series of articles by successful teachers of adults were in the Journal of Adult Education published by the American Association of Adult Education. These articles included strategies that deviated from the longstanding pedagogical model. According to Knowles (1970), the authors of these articles expressed a sense of guilt for violating academic standards, such as substituting interviews for quizzes. Knowles (1970), hypothesized that this guilt may derived from the lack of theory to support the authors practices because they appeared to simply be pragmatic and following their intuitions.

During the sixties information about adult learning accumulated from related disciplines such as clinical psychology, developmental psychology, especially the new
group of life-span developmental psychologists, gerontology, sociology, and anthropology in both in North America and Europe (Knowles, 1970). This research-based knowledge now supported the intuitions of the earlier teachers therefore theorists, drawing from the knowledge from both sources, constructed a comprehensive, coherent theory of adult learning (Knowles, 1970).

**Andragogy in practice.** The term “Andragogy” was coined deriving from the Greek word aner (with the stem andr-), meaning "man, not boy" or adult (Knowles, 1970). Knowles (1970), describes andragogy as “the art and science of helping adults learn, in contrast to pedagogy as the art and science of teaching children” (p.43). In order to fully benefit adults in a training session, certain concepts of Andragogy must be considered. The role of experience is important in adult education, according to (Knowles, 1970), because adults define themselves largely by their experience, they have a deep investment in its value; an adult educator can place emphasis on techniques that tap into that source of experience.

There is also a timing and relevance for learning in andragogy, for example if a Company held a new worker orientation they would not discuss the history or employees of the company but rather concerns that regards the new worker (Knowles, 1970). Knowles (1970) also explains that adults engage in learning in response to pressures they feel from their current life situation. To adults, “education is a process of improving their ability in what they face now” (Knowles, 1970, p. 53). All these concepts must be integrated for the success of this project.

This literature reviewed concepts pertinent to the success of this project such as developmentally appropriate practices and aquisition of skill from reflexive movements.
It entailed the importance of incorporating these practices in swim lessons but within the scope of adult education.

**Preview of Chapter Three**

In the following chapter, the researcher will present the detailed experience of the training workshop. This will include the development of the project, its creation and intended audience, and the personal qualification of the present researcher.
CHAPTER THREE

METHODS

Introduction

This project was developed to train new swim instructors for Santa Rosa Swimming to provide developmentally appropriate swim lessons. This workshop is intended as a basic foundation that introduces child development concepts transposed to swim skill acquisition so that instructors may best teach these skills. This chapter describes the development of the workshop, its intended audience, the personal qualifications of the researcher and of those who might implement such a workshop in the future, as well as the environment and equipment required for this project.

Development of Project

Purpose of the Workshop

In the past, training for new instructors at Santa Rosa Swimming was done by shadowing a veteran instructor to see how they conduct swim lessons and learn some of the vocabulary they use and skills they teach. The new instructor would have the opportunity to ask any questions during these lessons and eventually the roles would be reversed and the new teacher would lead a lesson while the veteran teacher observed. There also has been a brief meeting prior to the start of the swim season, which runs May through September, to discuss any news about the swim school and different, efficient strategies used the prior summer; in other words it was a “refresher” meeting. There has
not been a need to implement an official training, where all instructors meet to train in the same course, due to the small operation of the swim school and the knowledge that the veteran instructors, Kristin Green and the present researcher were already educated in early childhood development and implemented those practices in the brief training sessions.

This past summer, however, the operation of the business grew and the need for more instructors was eminent yet the previous form of induction was not as effective as having group training in successful teaching techniques. The present project would be implemented instead of a “refresher” meeting so that all instructors could build a foundation, based on knowledge of child development and best teaching practices, for which to implement their swim lesson plans.

Creation of the Workshop

The workshop was divided into two parts beginning with theory and then practice. The theory piece of this project was presented in a PowerPoint lecture while the second part was set in the pool with the present researcher demonstrating the techniques from the lecture. Prior to the beginning of the workshop a Pre-Workshop Survey was administered to evaluate the success of the workshop.

The PowerPoint lecture began with information related to the risks associated with children and pools. This included statistics provided by the Centers for Disease Control (2008) that reports that the leading cause of death in children 1-4 years old in 2008 was unintentional drowning. Furthermore, Gipson (2010), states that between 2005-2007 84% of pool or spa related deaths occurred in residential locations and 77% of those
deaths were of children under five years old. In other words, the leading cause of death in
children between 1-4 years old occurs in their own backyards! Therefore, the Consumer
recommend enrolling children in swim lessons as part of a multi-layered effort to prevent
drowning incidents. The U.S. Consumer Product Safety Commission (2002), the Centers
for Disease Control (2012) and the American Academy of Pediatrics (2003) warn that
there is no such thing as a “drown proof” child, even if they are enrolled in swim lessons.

The lecture then proceeded to describe Santa Rosa Swimming’s philosophy and
the purpose of the training. Child development practices that were pertinent to teaching
swim lessons included the importance of play and temperament was then explained. For
example, how play facilitates a child’s development by building on knowledge the child
may already have (Wayne, 2010) and it enhances learning through comprehension,
attention span, curiosity, empathy, concentration and group participation (Bodrova &
Leong, 2003). It is presumed that enhancing learning through play would result in a child
being more at ease in the swim lesson and better able to fully understand water safety
skills. As such, every instructor should understand and implement this concept in their
lessons.

The researcher then presented several skill sets that three different levels of
learners should know based not just on age but on skill level as well. The divisions were
“Baby Lessons”, “Children’s Lesson- Introduction”, and “Children’s Lesson- Ready to
move.” Each skill was presented with developmentally appropriate techniques that can
be built upon as the child progresses in skill acquisition. Given the literature on
determining a child’s level of skill not solely by age but also by experience, video clips were presented of young children doing extraordinary swimming to provide examples.

After the lecture and any questions presented by the instructors, there was a small break for snack, the researcher also prepared for the pool portion of the workshop during this intermission. Although chairs were set up around the pool for the instructors to observe the lessons, they decided to sit much closer to the pool, opting to sit on the deck floor by the pool’s edge. The researcher then proceeded to demonstrate the skills sets presented in the lecture. The researcher demonstrated the “Baby Lesson” skill sets with a 10 month old baby, while the “Children’s Lesson- Introduction” and “Children’s Lesson- Ready to move” skill sets were modeled by a 5 year old. Meanwhile, the researcher answered any questions the instructors had regarding the presentation. Questions included “Where are you placing your hands?” or “What is that skill for?” A post workshop survey was administered after the pool portion of the workshop.

**Intended Audience**

The target audience for this workshop is new and current swim instructors at Santa Rosa Swimming. In future iterations this workshop could be expanded and used for swim instructors working in other swim schools or privately.

**Sample**

The workshop participants included five female instructors. They all had some form of teaching experience ranging from pre-school to elementary education. Their education background and swimming history varied vastly; one had some college education and had only had a few swim lessons as a child and enjoyed to swim leisurely,
two of the participants had their Teaching Credentials and both had been competitive swimmers for at least five years. Another participant had a degree in Child Development, and was in her high school swim team. The last participant had her Masters Degree in Educational Psychology and had also competitively swam for over fifteen years. Four of the five participants had worked at Santa Rosa Swimming during previous summers, the other participant had never taught swim lessons. Santa Rosa Swimming owner Kristin Green was one of the participants; although she has extensive training and experience she had not been formally exposed to the content of the workshop that merges swim lessons and child development training. Of the five instructors, however, it was the participant with the least swimming and teaching experience that proved to gain the most information from this workshop.

**Personal Qualification of the Present Researcher**

The present researcher swam competitively from childhood through university; she was a private swim instructor during her undergraduate studies from 2004 to 2008 prior to working at Santa Rosa Swimming from 2008 to the present. During the summer months (from May to September) swim lessons are this researcher’s primary employment, working up to 30 hours per week as one of two main instructors. The researcher also participated in the Early Childhood Education (ECE) program at California State University, Northridge (CSUN) and observed that what sets Santa Rosa Swimming above other swim programs is the developmental appropriate practices integrated into the lessons. Hence, following discussion with Kristin and Professor Sloane Lefkowitz Burt of CSUN, the researcher sought to create a training workshop
program that will provide a framework for others to understand what was innate to the researcher and Mrs. Green. The researcher is passionate about swimming and devoted to children’s development; and when the opportunity arose to both improve a swim program she was invested in and create a Thesis Project for her culminating ECE experience, she could not decline.

**Environment and Equipment**

The environment for this project is the same environment as the place of employment for the swim instructors: Kristin’s home and backyard pool. The equipment for the project included pre and post surveys, a venue equipped with pool space, and a projector for the theoretical presentation, or, in this case, a television for a large view of the presentation. Snacks were provided for the participants during the *PowerPoint* presentation and sat in Kristin Green’s living room while the researcher presented on a television screen. For the pool portion of the workshop, the researcher also needed two participants, one infant and one child, to demonstrate the water skills in the pool.

**Project Outline**

This project was established in the fall Semester of 2011 with an idea that sparked from Kristin Green and the present researcher as well as Professor Sloane Lefkowitz Burt’s firsthand experience with Santa Rosa Swimming. Professor Lefkowitz Burt and the researcher discussed several different avenues for the workshop and what would be the most pertinent information to present in this project. Several meetings were established between then and the final completion of the project to assure the researcher completed the project and met all requirements.
Implementation

In the spring of 2012, the researcher set up a date when the participants could allot two hours for a PowerPoint presentation (Appendix A) followed by a pool demonstration of skills presented in the PowerPoint (Appendix B). The presentation described: Santa Rosa Swimming’s philosophy; the purpose of the workshop; information on child development related to play, temperament and goodness of fit; a description of the progression of water skills taught based on research regarding what skills a baby and young children can acquire. The pool demonstration afterwards included a 10-month old baby as an example of the skills described in the PowerPoint followed by a 5-year old girl as an example for the older child skills.

Initial Experience

There was an initial struggle in gathering all participants to the workshop but once a time and date were officially set all participants attended. The setting for the workshop was casual as a reflection of the relaxed working environment. Prior to the presentation, the participants were asked to complete a Pre-Workshop Survey to gather information about them and to determine their base knowledge of the information which was presented in the workshop. This would then be coupled with the Post-Workshop Survey to assess the success of the project. During the workshop the participants were given a handout of the PowerPoint slides to take any notes necessary.

After the PowerPoint portion of the workshop the participants were then led to the backyard pool to demonstrate the skills that had been introduced. Although chairs were set out for the participants, they all sat on the floor deck closer to the researcher and
the children participants. A progression of the swimming skills was demonstrated with
the infant and 5 year old child. Finally, to conclude the workshop a Post-Workshop
Survey was completed.

Participant Surveys

To determine the success of the project participant surveys were created and
distributed at the beginning and end of the workshop. The Pre-Workshop Survey
included questions pertaining to the participants’ educational background, swimming and
teaching swimming experience. The participants were also asked to respond to several
scenarios of children and swimming at different stages in development (Appendix C).
The Post-Workshop Survey included the same scenarios as the Pre-Workshop Survey in
the hopes that the participants would respond differently by applying some of the
techniques from the workshop. The Post-Workshop Survey also asked questions to
evaluate the workshop itself, what the participants learned, what they found most
interesting, and suggestions for future improvements (Appendix D).

A Preview of Chapter Four

In the following chapter, the researcher will present a summary of the project and
responses to the Post- Workshop survey. It will discuss the results of the workshops and
future work regarding the project.
CHAPTER FOUR

RESULTS AND CONCLUSION

Introduction

The U.S. Centers for Disease Control and Prevention stated that in 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008). Between 2005-2007 there were 385 pool or spa related deaths of children under fifteen years old; 84% occurred in residential locations and 77% of those deaths were of children under five years old (Gipson, 2010). This means that children under five years old are at risk of dying in their own backyard!

Moreover, the Centers for Disease Control (2012) state several factors for unintentional drowning; those pertaining to swimming pool drowning risks include a lack of swimming ability or barriers to prevent unsupervised access to water and, most importantly, a lack of close supervision while swimming. Thus, the U.S. Consumer Product Safety Commission (2002) and the Centers for Disease Control (2012) recommend multilayered protective barriers to reduce the risk of drowning such as building fences around pools, installing alarms around nearby doors, as well as enrolling children in swim lessons.

The Current Study

In Thousand Oaks, California there are several swim programs that parents may choose from, each with their own philosophies, methods and trainings for their instructors. One of these programs is Santa Rosa Swimming owned by Kristin Green, an energetic entrepreneur with a Masters Degree in Early Childhood Education from California State
University, Northridge with an extensive background coaching swimming. She is also one of the current lead instructors along with the present researcher, Yvonne Boeing, who is working towards a Masters Degree in Early Child Education. After years of practice and education they have created a methodology that allows children to learn how to swim in a developmentally appropriate and fun way.

Today, the business is growing and there is a need to hire new instructors. Along with hiring new teachers, there is a need for a training workshop that educates them on the philosophy and techniques that make Santa Rosa Swimming unique and successful. Therefore, the purpose of this project was to create a training workshop that implemented what Kristin Green and this researcher had developed in recent years derived from their knowledge in early childhood development and swim skills. This graduate project details the development of a training workshop that orients instructors in Santa Rosa Swimming’s unique philosophy about how to effectively teach swimming to children, the child development research behind the methods, and key water safety skills to incorporate into their lessons.

Summary

The workshop was presented to five female instructors. They all had some form of education background, ranging from experience in pre-school to elementary classrooms. Four of the five had at some point their career worked at Santa Rosa Swimming, the other participant had never taught swim lessons before. Kristin Green was one of the participants; although she has extensive training and experience she had not
been formally exposed to the content of the workshop that merges swim lessons and child development training.

The workshop included a *PowerPoint* presentation followed by a pool demonstration of the skills explained in the lecture. The lecture provided information on developmentally appropriate practices such as the importance of play and temperament then different basic swim kill sets founded on these concepts. The skills were established for three different learners based on not just age but skill level as well. The divisions were “Baby Lessons”, “Children’s Lesson- Introduction”, and “Children’s Lesson- Ready to move.” The pool demonstration consisted of the skill sets presented in the lecture with a 10-month old infant and a five year old child.

Pre- and post-workshop surveys were used to evaluate the effectiveness of the workshop. Effectiveness was measured by the ability of the participants to recall new vocabulary and techniques related to the swim lessons.

**Pre-Workshop Survey**

Both pre- and post- workshop surveys provided scenarios related to young beginning swimmers. Scenarios included an infant swimmer, a child afraid of the water, a child that does not like her eyes getting wet, a child with vertical body alignment in the pool and a swimmer ready to propel across the pool. Each scenario was followed up by a series of questions such as “how would you teach this child to go underwater?” or “how would you teach this child to float on his back?”

**Results.** The participants that had been previously employed at Santa Rosa Swimming had similar, yet broad responses such as “sing songs” or “play games” but did
not specify exactly what techniques/steps they would conduct to teach particular swim skills. There was also failure to demonstrate any vocabulary terms appropriate for children to understand swim skills presented. One participant responded that to teach an infant to go underwater she would “blow in his face after counting down from five” although this method has been used by other swim programs, this was not a suitable response in accordance to developmentally appropriate practices. As stated by the prior literature review, blowing on a child’s face activates the Moro reflex and trains the child that only by having a gust of wind to the face can he submerge underwater. A countdown of five is also too long of a time span versus a countdown of three. The countdown of three followed by an immediate inhale by the adult holding the child conditions the child to trigger the Moro reflex when water touches his face therefore holding his breath right before submerging not.

Additionally, two participants responded that they would “demonstrate and have the child copy” although this is an integral part of instruction there is also a component where a child needs to understand how his/her body should move. This is where the instructor physically needs to maneuver the child’s body for proper alignment/movement. For example, after demonstrating the arm movement to swim, using vocabulary such as “pizza arms” the instructor needs to move the child’s arm in the circular motion for the child to retain proper muscle memory. These were responses that the present researcher was hoping to correct by giving the instructors more tools as well as a lens for developmentally appropriate swim lessons.
Post-Workshop Survey

The same scenarios and follow up questions were asked for the post-workshop survey to determine if any of the theories, techniques and vocabulary for teaching necessary swim skills was retained after the workshop. The most notable difference was that the participants responded in more detail. For example, for teaching a child how to be more comfortable wetting her eyes, a participant responded “ask her parent to bring a treat to the lesson for the child as a reward” in the pre-workshop survey but in the post-workshop survey responded “play games that involve splashing, such as ‘Simon says.’” Participants also included specific vocabulary terms for each technique such as “pit stop, bottoms up, and turtle.” Given the details for each response from the participants, change was apparent and therefore a difference in results from pre to post-workshop surveys.

Evaluation of Workshop

The final section of the post-workshop survey asked the participants to evaluate the workshop. The questions asked participants to list three new concepts learned in the workshop, what aspects of the workshop were most interesting, in what ways was the workshop helpful and any suggestions for improving future training workshops. Results from the post-workshop indicated that all the participants learned at least three new skills and acquired new vocabulary such as “jellyfish float”, “bobbing like a turtle”, “pizza” and “humming bubbles.” All participants stated that they enjoyed the water demonstration after the lecture as well as the video clips in the PowerPoint. After the workshop the instructors voiced other opinions of the workshop. For example, one instructors said “I really liked that I could understand what you were trying to present, I
did not swim competitively like the rest of you but I know feel I can teach water safety
skills.” Another followed that comment with, “I have been an instructor for five years and
there were tools there that I had seen you (the present researcher) do but didn’t really
know how to do; now I can use your ‘moves’.” Several participants did state that for
future workshops it would be helpful if the trainees could participate in the water training
portion of the training, in other words more of “hands on” training. Overall, the workshop
was successful and minor improvements were noted for future presentations.

Discussion/Future of the Workshop

During the conversations held at the end of the workshop, by the attendees and
the presenter, a discussion for future trainings arose. Although visual aids and
demonstration were the strength of the presentation, participants did recommend that
instructors (workshop participants) get in the pool while the presenter demonstrates the
water skills. They believed that getting in the water while the trainer (present researcher)
demonstrated techniques for teaching swim lessons would provide a better learning
experience. For example, when the present researcher demonstrated how to hold a child
floating on his back, the participants mentioned that it would have been beneficial had
they each been able to take a turn while the present researcher corrected any adjustments
needed. Therefore, future training workshops would benefit from instructors
participating in the water segment of the workshop. The scenarios used in the pre- and
post- surveys were found to be useful in measuring knowledge and attitudes as well.
Reflecting the purpose of the project, the PowerPoint was used to train two new hires in
the middle of the season and served as foundations training. Kristin Green utilized the
PowerPoint to briefly explain Santa Rosa Swimming’s philosophy as well as foundational tools for building future swim skill sets. Both new instructors said they benefited from the workshop and they did participate in the water during the pool presentation of the training.

Although this training workshop did meet the goal of presenting new instructors with a foundational framework of child development in a swimming lesson setting, it was brief and only presented a limited number of tools. This training workshop was very brief and only scraped the surface of the skills needed to teach all children of various ages. It did not cover any techniques such as stroke work or endurance training for older children or more advanced swimmers. In the future, workshops for this age/skill set group would be needed but as a separate training from this present workshop. In other words, this present training workshop is an excellent beginner or introductory training but a more in-depth as well as techniques for teaching strokes and endurance for older and advanced swimmers is needed.

Another point of discussion was the setting of the training itself. It would be beneficial if the training took place in a different, still relaxed environment. The present researcher did feel that having the children of the participants present created a distraction for not only the researcher but other participants as well. A possible meeting at a coffee shop or a lunch setting might beneficial to reduce interruptions in the training or possibly having the children arrive at the conclusion of the workshop.

This workshop will continue to serve Santa Rosa Swimming as part of its previous “refresher” meeting. This is due to the participant’s enjoyment of being able to “refresh” each other’s memories on techniques they may have used the previous summer.
as well as learning new techniques from the workshop. Kristin and the present research
have also discussed creating waterproof flashcards with pictures of techniques for easy
accessibility. A possible creation of a file folder including techniques used during the
season would be another helpful tool in the continuity of developing new techniques.

Conclusion

The present researcher has two special interests: children and swimming. To have
the opportunity to bring to light both these concepts through this thesis project as well as
benefit her current place of employment was easy to accept. The need for this project was
indicated when new teachers, although aware of child development practices and
swimming, they had been mutually exclusive and had not been combined into one
practical concept. This project merged those concepts to further educate instructors on
how to best benefit children in their swim lessons.

The workshop did serve its intended purpose of proving a foundations framework
for incorporating developmentally appropriate practices such as play in swim lessons. It
was then used again later in the summer to introduce new instructors to Santa Rosa
Swimming. This project may serve as a model for future training workshops for swim
instructors.
References


Appendix A

I Swim. You Swim. We Swim Differently!
Santa Rosa Swimming
Instructor Training Workshop

Santa Rosa Swimming Philosophy

To teach children not only water safety skills but also a lifelong appreciation of the numerous benefits of swimming. Most importantly, Santa Rosa Swimming believes in a patient, gentle, and fun approach to reaching these goals.
THERE IS NO SUCH THING AS “DROWN PROOFING” A CHILD!
Swim Lessons are just an extra precaution in the many steps to prevent drowning. NOTHING beats vigilant adult supervision.

Purpose of this Workshop
* This Workshop is intended to fill your instructor “tool box” with either refresher or new techniques to incorporate into your lessons.
Introduction

- Buzzlightyear Vignette
- In 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008)
- There were 385 pool or spa related deaths of children under fifteen years old; 84% occurred in residential locations and 77% of those deaths were of children under five years old (Gipson, 2010). In other words, children under five years old are at risk of dying in their own backyard!
What is Play?

- A “minimally-scripted, open ended exploration in which the participant is absorbed in the spontaneity of the experience” (Ortilieb, 2010, p. 241).

- It “facilitates a child’s development by building and extending knowledge” (Wayne, 2010, p. 15).

Play cont.

- It also “enhances learning by developing compression, attention span, curiosity, empathy, concentration and group participation” (Bodrova & Leong, 2003 as cited in Wayne, 2010, p. 17).

- Above all it must “include some element of fun in addition to being internally motivating” (Wayne, 2010, p. 17).
Benefits of Play

- The child is the expert in his own controlled environment (Hyvonen, 2011).
- Through play, knowledge can become an internal relation between the child and his/her world (Samuelson & Carlsson, 2008).
- “When children are actively involved, they remember the information they gather better than information simply given to them” (Drew, Christie, Johnson, Meckley & Neil, 2008, p. 40).

Swim Lessons and Play

- “For optimal learning to occur through play, children need support and time ...to stimulate the brain to think imaginatively” (Drew et al., 2008, p. 42)
- As exposure to the pool and water may be a new experience to many children it is important to relieve that tension by giving the child control of the environment.
- Patience is key. If through play children retain information, then the water skills taught in lessons will be remembered not just for the next lesson but in their own pools as well.
Temperament

What is temperament?

- It is biologically based, evident early in life and has some stability over time and situations (Keogh, 2003)

- It is the “how” of behavior (Thomas & Chess, 2007 as cited in Keogh, 2003)

- Differs from ability- the “what and how well” of behavior and motivation- the “why” (Thomas & Chess, 2007 as cited in Keogh, 2003)
Types of Temperaments

- Important to note that no particular temperament is good or bad, rather it impacts adjustment to environments, in this case water (Peico & Reed-Victor, 2003).
- Easy = adaptable, positive mood, moderate intensity, interested in novelty, social and friendly (Keogh, 2003).
- Difficult =negative mood, intense, low in adaptability and withdraw in new situations (Keogh, 2003).

Types of Temperaments cont.

- Slow to warm=initially shy in new situations, they are moderate in intensity but with time and when comfortable they are positive in mood, responsive and sociable (Keogh, 2003).
- Child temperaments have also been explained as dramatic (big highs and big lows) or mellow (quiet and express mildly) It is important to note that communication signals are harder to read from mellow tempered children (Peico & Reed-Victor, 2003).
Goodness of fit

- This results when “the child’s temperament and the environmental demands and expectations are in accord” (Peico & Reed-Victor, 2003, p. 4).

- **Instructors can work toward increasing goodness of fit by making simple changes within the environment or swim lessons so the child can function or learn more effectively** (Peico & Reed-Victor, 2003, p. 4).

Swim Lessons and Temperament

- It also important to note that within temperament there a dimension of persistence (Peico & Reed-Victor, 2003). Some children are “I’ll keep trying,” others are “I’m done” - pay attention to their signals and words.

- As instructors, we should adjust our lessons according to these temperament dimensions from observations and initial interactions with the child. We should mold the way we approach each child. Tone of voice, body language and the speed at which skills are taught depend on this.
Introduction to the Water: Baby

- A baby or Parent Tot swim lesson at Santa Rosa Swimming is usually children under 2 sometimes 3 years old. There have been babies that begin private lessons before this age yet it all depends on the skill and comfort level of the child.
- Usually a parent will join in baby lesson so the child will be at ease.
- Both parent and child enter the water at the same time. Encourage parent to use comforting tones (“oooh this feels niiice”)
Introduction to the Water: Baby

- Hold baby under armpits either when face-to-face or from behind his/her back when baby is on tummy.

- Songs:
  - “Ring around the Rosie”
  - “Slippery Fish”
  - “The Wheels on the Bus”

- Ears wet- holding baby under armpits facing parent (close proximity to face) tilt baby’s body to the right so ear graces the water, parent mimics action while in sing song voice says “eeeeears wet” repeat on other side.

Introduction to the Water: Baby

- Keeping baby close to your face blow bubbles with your mouth. Notice how baby tilts head forward, mirroring your actions.

- Say “1, 2,3” then inhale. Practice this as you dip baby’s chin in the water. Notice he/she may blink as you do so.

- Once parent and baby feel comfortable enough you may attempt a shallow dip with baby. “ 1, 2, 3” inhale.

- Once baby is able to hold breath longer you may slowly glide baby back and forth between you and parent.
Baby Float

- **1st** Baby’s back is laid flat against parent’s/instructor’s chest. Baby’s head rests on parent’s/instructors chest head is out of water and lower back is supported. Comforting tone of voice is used as adult and baby slide back and forth on top of water.
- **2nd** As baby becomes more comfortable slowly begin to slide baby further from chest, allow for ears to touch the water. This may take several tries during different sessions.
- **3rd** Supporting just the lower back and back of the neck lay baby flat on top of water slide back and forth. Ears are submerged.

Baby Float cont.

- **4th** The hand that supports the baby’s lower back is removed first allowing for the baby to feel his/her own lower body weight in the water. Replace the hand on the lower back and remove the hand supporting the baby’s back of the neck. Allow the baby to feel the weight of his head. This alternating process may take time until both hands can be removed when the baby has learned his/her buoyancy in the water.
The child lesson can begin as early as when a baby begins to walk or have better control of his/her limbs and can follow more complex directions (“Can you kick, kick, kick?”). All methods from baby lessons can be built upon in child lessons. (1, 2, 3 inhale carries over)

“Today’s child is visually oriented, with a secondary emphasis on trial and error. This has made them ‘visual learners.’ So you need to be a ‘visual teacher’” (Leonard, 2011)
Child Lesson Introduction cont.


- “Pull through the stroke” is not understood the same as “big circle arms or helicopter swings”

Face and Eyes Oh my!

- There are a few games to first introduce a child to getting face/eyes/ears wet.
- “Let’s wash our faces!” Have child pick up water with hands and wash face. Notice if they wet their eyes or not.
- “Can you?...” “Simon says...” (touch the water with forehead?) Notice child lean face down closer to water and oh! Eyes got a little wet.
- “Humming bubbles or Happy noses” - “Did you know that if you close your lips and hum a little song your nose giggles?! Watch this!”
Body Positioning

- Once child can submerge his/her head underwater you can begin to teach body positioning.
- “Jelly fish man/girl!” laying flat on the surface of the water demonstrate how a jellyfish lays on top of the water pretending your arms and legs are tentacles.
- “Push and pull” once you have established a horizontal position you can begin to move the child away from the reef/step. Have him/her pull your “tentacles” while you look down and vise versa.
- “Timber!” demonstrate how to fall like a tree and then turn into to “jellyfish man/ girl”

Getting ready to move!

- “Walking off the plank” - demonstrate walking off the step straight down and bouncing from the bottom of pool floor. Start by catching child then progress to letting him/her do it on his/her own.
- “The plank to Jellyfish man/girl” demonstrate how to step off the reef/step, then positioning body horizontally into “jellyfish man/girl”.
- Kicking- asking children to kick on stand is somewhat simple but sometimes when the child separates legs to much, propulsion is lost. Pretend to “wrap” the child's knees together so they keep them closer.
Let’s move!

- “Follow the breadcrumbs” – Now that child lays body flat and kicks, place toys about a foot apart on the shelf/reef. Ask the child to look for toys and travel on his/her belly like an alligator to each one. At each “crumb” or toy lift head to take a breath (introducing the next skill).
- “Pizza arms shoot the rocket!” A breaststroke approach to swimming is easier for children to grasp as it is a parallel movement instead of a lateral movement such as freestyle. Demonstrate tracing a pizza (ask for favorite toppings!) then bring hands together to shoot them out in front of body like a rocket. Repeat!
Let’s move! Continued

- “Pit stop!” as child begins to progress to swimming longer distances place yourself between two points. Ask the child to make a pit stop to catch their breath before swimming to the next step.
- If child’s body begins become vertical in their water as they swim notice where they are looking. The body follows where the eyes look.
- “Shark and goldfish” you’re the shark, child is goldfish in order to get to the step across the pool they cannot look at shark otherwise… Nom nom! Keep those eyes down!

Child Lessons - Ready to Breathe

• http://www.youtube.com/watch?v=kT4VjgbqzJ8&feature=related
Take a breath

- To dive for toys –don’t forget “bottoms up seven up!”- grab toy- then bounce with feet to the top.
- “Bobbing apple” using “walk the plank” have child bounce from bottom floor ask them/demonstrate shooting arrows/darts from their chins to the sky and taking a big gulp of air. Might need assistance to fully get head out of water.
- “Turtles” either with a picture of a turtle or through demonstration. Show how a sea turtle pops just its head out of the water but the shell (body) stays exactly the same.

Last Thoughts:

- These are just a few techniques to include in your swim lessons but key components are:
- Play: Have fun with the child in your lesson, find out what they really enjoy by asking questions or if they are too young tread on the side of caution and treat a baby as “slow to warm.” Be confident, yet respectful.
- Temperament: Usually by the third 20 minute lesson you should know what kind of temperament the child has.
- No two lessons even if the children are the same age/temperament and skill level are the same.
Thank you for your time. I hope you enjoyed this presentation.
Now to the pool!
Appendix C

Santa Rosa Swimming Workshop

Pre-Workshop Survey

Please answer the following questions about yourself:

1. What is your educational background/experience?

2. What is your swimming history? (For example were you/are you in a competitive swim team? Did you take swim lessons when you were a child?)

3. How long have you been teaching swimming skills to children?

4. What, if any, training have you received specific to teaching swimming skills to children?
The following scenarios are related to young beginning swimmers. Please respond to the questions to describe how you would approach teaching this child to swim.

Michael is an 8 month old baby and this is his and his mother’s first pool experience…

5. How would you teach Michael to go underwater?

6. How would you teach Michael to float on his back?

Nancy is 2 years old and, according to her mother, is afraid of getting in the pool…

7. How would you begin your first swim lesson with Nancy?

Emily is 4 years old and this is her first “official” swim lesson. Her father said she gets in their backyard pool but does not like to get her eyes wet and definitely does not submerge her head underwater.

8. How would you teach Emily to get her eyes wet? Submerge her head?

John is 3 years old and loves to look underwater however when he tries to kick away from the step/reef his body begins to turn vertically.

9. How would you teach John to keep his body horizontal on the water?
Jacky is 5 years old, she looks underwater, she jumps out to you and will let go of the kick stick when close enough to the sides of the pool. She does not propel herself across long distances in the pool.

10. How would you teach Jacky to propel herself across the water?

11. How would you teach Jacky to dive underwater?

12. How would you teach Jacky to lift her head out of the water to take a breath?
Appendix D

Santa Rosa Swimming Workshop

Post Workshop Survey

Now that you have completed the workshop please answer the following scenarios.

The following scenarios are related to young beginning swimmers. Please respond to the questions to describe how you would approach teaching this child to swim.

Michael is an 8 month old baby and this is his and his mother’s first pool experience…

1. How would you teach Michael to go underwater?

2. How would you teach Michael to float on his back?

Nancy is 2 years old and, according to her mother, is afraid of getting in the pool…

3. How would you begin your first swim lesson with Nancy?

Emily is 4 years old and this is her first “official” swim lesson. Her father said she gets in their backyard pool but does not like to get her eyes wet and definitely does not submerge her head underwater.

4. How would you teach Emily to get her eyes wet? Submerge her head?
John is 3 years old and loves to look underwater however when he tries to kick away from the step/reef his body begins to turn vertically.

5. How would you teach John to keep his body horizontal on the water?

Jacky is 5 years old, she looks underwater, she jumps out to you and will let go of the kick stick when close enough to the sides of the pool. She does not propel herself across long distances in the pool.

6. How would you teach Jacky to propel herself across the water?

7. How would you teach Jacky to dive underwater?

8. How would you teach Jacky to lift her head out of the water to take a breath?
Evaluation of Workshop

1. Please list at least three (3) new things you learned in the workshop:

2. Which aspect(s) of the workshop did you find most interesting?

3. In what ways do you think this workshop was helpful?

4. Do you have any suggestions for how to improve the workshop in the future?

Thank you so much for your time and participation!

Yvonne Boeing
Appendix E

Santa Rosa Swimming Workshop

Post Workshop Survey Responses

Now that you have completed the workshop please answer the following scenarios.

The following scenarios are related to young beginning swimmers. Please respond to the questions to describe how you would approach teaching this child to swim.

Michael is an 8 month old baby and this is his and his mother’s first pool experience…

1 How would you teach Michael to go underwater?

- “Wash faces, ears wet, inhale before going in”
- “I would teach through play, give cue holding under armpits (face front) ‘1,2,3’ inhale”
- “Wait until he’s comfortable/happy in the water, dip him with mom”
- “Making sure your holding him under the arms blowing bubbles. Keeping him close to you (faces) passing him back and forth between mom and you inching slowly bit by bit under water no more than 3 chokes”
- “I would say ‘1,2, 3’ and inhale to get the child to understand what comes next”

2 How would you teach Michael to float on his back?

- “Start on back w/baby’s back to my stomach”
- “Start w/float on shoulder, then move body down arm for support, then hand under back only, then all by self”
• “Support neck, lower back lean him onto your chest”
• “Rest him on your body (chest) holding his head slowly move him down the front of your body keep holding his head then remove one hand back and forth hand to hand until he feels buoyant then move hand”
• “Lay baby head on parent’s chest, and support the baby”

Nancy is 2 years old and, according to her mother, is afraid of getting in the pool…

3 How would you begin your first swim lesson with Nancy?

• “Play, make connections”
• “Talking about interests, then playing in the pool”
• “Make connection, start on steps, play, play, play”
• “At the edge of the pool find something you and child can relate to. distract with toys gradually move toys into the water”
• “I would make it a play time so Nancy doesn’t realize we are learning swim skills.”

Emily is 4 years old and this is her first “official” swim lesson. Her father said she gets in their backyard pool but does not like to get her eyes wet and definitely does not submerge her head underwater.

4 How would you teach Emily to get her eyes wet? Submerge her head?

• “Simon says”
• “Look at toy underwater, wash our faces, Simon says, give specific cues when going underwater”
• “Ask child to dip her chin, forehead, nose, eyes and head progressively”
• “Find toys she likes and put them in the water just out of reach after a little while just face in the water at first. Then move deeper into the water”

• “I would use games like ‘let's wash our face’ play games like ‘Simon says’ or ‘humming bubbles’”

**John is 3 years old and loves to look underwater however when he tries to kick away from the step/reef his body begins to turn vertically.**

5 How would you teach John to keep his body horizontal on the water?

• “Look at the bottom of the pool, play shark and goldfish game”

• “Put face in the water, float”

• “ ‘Walk the plank’ to ‘Jellyfish’”

• “ ‘Walk the plank’ to ‘Jellyfish’ float”

• “Jellyfish game”

• “I would teach him the ‘Jellyfish man’ ask to add kicks after he gets it”

**Jacky is 5 years old, she looks underwater, she jumps out to you and will let go of the kick stick when close enough to the sides of the pool. She does not propel herself across long distances in the pool.**

6 How would you teach Jacky to propel herself across the water?

• “Pit Stop”

• “ ‘Follow the breadcrumbs’ put toys at bottom to swim over”

• “ ‘Follow the breadcrumbs’”

• “Forehead to water bottoms up”
• “I would pretend play that she needs to follow bread crumbs, or be an alligator”

7  How would you teach Jacky to dive underwater?
• “ ‘Bottoms up, seven up’”
• “ ‘Bottoms up’”
• “ ‘Bottoms up’”
• “Forehead to water, ‘bottoms up’”
• “Use ‘bottoms up’ terms

8  How would you teach Jacky to lift her head out of the water to take a breath?
• “ ‘Turtle’”
• “Bobbing for apples or ‘turtle’”
• “ ‘Turtle’”
• “Bobbing for apples or ‘turtle’ not moving your body only your head like a turtle”
• “Use ‘turtle’ term”

Evaluation of Workshop

5. Please list at least three (3) new things you learned in the workshop:
• “ ‘Turtle’, follow the breadcrumbs”
• “ ‘Turtle’, bob for apples, breadcrumbs”
• “ ‘Turtle’, pizza arm/shoot the rocket, humming bubbles”
• “Play based learning is more productive, different games to play with kids in the water, make sure you read the child before you push the lesson”
“Play facilitates extended knowledge, child is their own expert in when controlling their environment, children need time, explain it to parents”

6. Which aspect(s) of the workshop did you find most interesting?

- “Demonstration”
- “The videos and demonstration”
- “Water demonstrations”
- “How to identify with the kids on different levels depending on the kid. Play, play, be safe and play”
- “How to use great visual, conceptual words for body positioning”

7. In what ways do you think this workshop was helpful?

- “Actually visually seeing lesson”
- “Notes for future reference and demons”
- “Good refresher”
- “Identifying different techniques for different development”
- “Reminded me of why we do all of this”

8. Do you have any suggestions for how to improve the workshop in the future?

- “Instructors get in the water”
- “Less theory more practice, overall very good!”
- “Have more instructors learn this!”

Thank you so much for your time and participation!

Yvonne Boeing
Appendix F
Workshop Handout

1. I Swim. You Swim. We Swim Differently!
   o Santa Rosa Swimming
   o Instructor Training Workshop

2. Santa Rosa Swimming Philosophy
   o To teach children not only water safety skills but also a lifelong appreciation of the numerous benefits of swimming. Most importantly, Santa Rosa Swimming believes in a patient, gentle, and fun approach to reaching these goals

3. Slide 3
   o THERE IS NO SUCH THING AS “DROWN PROOFING” A CHILD!
   o Swim Lessons are just an extra precaution in the many steps to prevent drowning. NOTHING beats vigilant adult supervision.

4. Purpose of this Workshop
   o This Workshop is intended to fill your instructor “tool box” with either refresher or new techniques to incorporate into your lessons.

5. Introduction
   o Buzzlightyear Vignette
   o In 2008 unintentional drowning was the leading cause of death in children 1-4 years old (CDC, 2008)
   o There were 385 pool or spa related deaths of children under fifteen years old; 84% occurred in residential locations and 77% of those deaths were of children under five years old (Gipson, 2010). In other words, children under five years old are at risk of dying in their own backyard!

6. What is Play?
   o A “minimally-scripted, open ended exploration in which the participant is absorbed in the spontaneity of the experience” (Ortlieb, 2010, p. 241).
   o It “facilitates a child’s development by building and extending knowledge” (Wayne, 2010, p. 15).

7. Play cont.
   o It also “enhances learning by developing compression, attention span, curiosity, empathy, concentration and group participation” (Bodrova & Leong, 2003 as cited in Wayne, 2010, p. 17).
   o Above all it must “include some element of fun in addition to being internally motivating” (Wayne, 2010, p. 17).
8. **Benefits of Play**
   - The child is the expert in his own controlled environment (Hyvonen, 2011).
   - Through play, knowledge can become an internal relation between the child and his/her world (Samuelson & Carlsson, 2008).
   - “When children are actively involved, they remember the information they gather better than information simply given to them” (Drew, Christie, Johnson, Meckley & Neil, 2008, p. 40).

9. **Swim Lessons and Play**
   - “For optimal learning to occur through play, children need support and time …to stimulate the brain to think imaginatively” (Drew et al., 2008, p. 42)
   - As exposure to the pool and water may be a new experience to many children it is important to relieve that tension by giving the child control of the environment.
   - Patience is key. If through play children retain information then the water skills taught in lessons will be remembered not just for the next lesson but in other pools as well.

10. **What is temperament?**
    - It is biologically based, evident early in life and has some stability over time and situations (Keogh, 2003)
    - It is the “how” of behavior (Thomas & Chess, 2007 as cited in Keogh, 2003)
    - Differs from ability- the “what and how well” of behavior and motivation- the “why” (Thomas & Chess, 2007 as cited in Keogh, 2003)

11. **Types of Temperaments**
    - Important to note that no particular temperament is good or bad, rather it impacts adjustment to environments, in this case water (Peico & Reed-Victor, 2003).
    - Easy = adaptable, positive mood, moderate intensity, interested in novelty, social and friendly (Keogh, 2003).
    - Difficult =negative mood, intense, low in adaptability and withdraw in new situations (Keogh, 2003).

12. **Types of Temperaments cont.**
    - Slow to warm=initially shy in new situations, they are moderate in intensity but with time and when comfortable they are positive in mood, responsive and sociable (Keogh, 2003).
    - Child temperaments have also been explained as dramatic (big highs and big lows) or mellow (quiet and express mildly)* communication signals are harder to read (Peico & Reed-Victor, 2003).

13. **Goodness of fit**
    - This results when “the child’s temperament and the environmental demands and expectations are in accord” (Peico & Reed-Victor, 2003, p. 4).
Instructors can work toward increasing goodness of fit by making simple changes within the environment or swim lessons so the child can function or learn more effectively (Peico & Reed-Victor, 2003, p. 4).

14. Swim Lessons and Temperament
- It also important to note that within temperament there is also a dimension of persistence (Peico & Reed-Victor, 2003). Some children are “I’ll keep trying,” others are “I’m done” - pay attention to their signals.
- As instructors, we should adjust our lessons according to these temperament dimensions from observations and initial interactions with the child. We should mold the way we approach each child. Tone of voice, body language and speed of skills depend on this.

15. Introduction to the Water: Baby
- A baby or Parent Tot swim lesson at Santa Rosa Swimming is usually children under 2, sometimes 3 years old, although there have been babies that begin private lessons before this age; it all depends on the skill and comfort level of the child.
- Usually a parent will join in baby lesson so the child will be at ease.
- Both parent and child enter the water at the same time. Encourage parent to use comforting tones (“oooh this feels niiice”)

16. Introduction to the Water: Baby
- Hold baby under armpits either when face-to-face or from behind his/her back when baby is on tummy.
- Songs:
  - “Ring around the Rosie”
  - “Slippery Fish”
  - “The Wheels on the Bus”
- Ears wet- holding baby under armpits facing parent (close proximity to face) tilt baby’s body to the right so ear graces the water, parent mimics action while in sing song voice says “eeeeears wet” repeat on other side.

17. Introduction to the Water: Baby
- Keeping baby close to your face blow bubbles with your mouth. Notice how baby tilts head forward, mirroring your actions.
- Say “1, 2, 3” then inhale. Practice this as you dip baby’s chin in the water. Notice he/she may blink as you do so.
- Once parent and baby feel comfortable enough you may attempt a shallow dip with baby. “1, 2, 3” inhale.
- Once baby is able to hold breath longer you may slowly glide baby back and forth between you and parent.

18. Baby Float
- 1st Baby’s back is laid flat against parent’s/ instructor’s chest. Baby’s head rests on parent’s/instructors chest head is out of water and lower back is supported. Comforting tone of voice is used as adult and baby slide back and forth on top of water.
2nd As baby becomes more comfortable slowly begin to slide baby further from chest, allow for ears to touch the water. This may take several tries during different sessions.

3rd Supporting just the lower back and back of the neck lay baby flat on top of water slide back and forth. Ears are submerged.


4th The hand that supports the baby’s lower back is removed first allowing for the baby to feel his/her own lower body weight in the water. Replace the hand on the lower back and remove the hand supporting the baby’s back of the neck. Allow the baby to feel the weight of his head. This alternating process may take time until both hands can be removed when the baby has learned his/her buoyancy in the water.

20. Child Lesson Introduction

The child lesson can begin as early as when a baby begins to walk or have better control of his/her limbs and can follow more complex directions (“Can you kick, kick, kick?”). All methods from baby lessons can be built upon in child lessons. (1, 2, 3 inhale carries over)

“Today’s child is visually oriented, with a secondary emphasis on trial and error. This has made them ‘visual learners.’ So you need to be a ‘visual teacher’” (Leonard, 2011)


“Demonstration, practice, feedback, repeat….with a very limited amount of ‘explanation.’ Very limited. Like phrases, rather than sentences. Make sure the ‘phrases’ paint a clear and simple ‘picture’ (Leonard, 2011). SIMPLE yet CHILD-LIKE minded!

“Pull through the stroke” is not understood the same as “big circle arms or helicopter arms”

22. Face and Eyes Oh my!

There are a few games to first introduce a child to getting face/eyes/ears wet.

“Let’s wash our faces!” Have child pick up water with hands and wash face. Notice if they wet their eyes or not.

“Can you...” “Simon says” (touch the water with forehead?) Notice child lean face down closer to water and oh! Eyes got a little wet.

“Humming bubbles or Happy noses”- Did you know that if you close your lips and hum a little song your nose giggles?! Watch this!

23. Body Positioning

Once child can submerge his/her head underwater you can begin to teach body positioning.

“Jelly fish man/girl!” laying flat on the surface of the water demonstrate how a jellyfish lays on top of the water pretending your arms and legs are tentacles.

“Push and pull” once you have established a horizontal position you can begin to move the child away from the reef/step. Have him/her pull your “tentacles” while you look down and vise versa.
o “Timber!” demonstrate how to fall like a tree and then turn to “jellyfish man/girl”

24. Getting ready to move!
   o “The plank” on the shelf demonstrate walking off the step straight down and bouncing from the floor up. Start by catching child first then progress to letting him/her do it on their own.
   o “The plank to Jellyfish man/girl” demonstrate how to step off the reef/step to then moving body horizontally into jellyfish man/girl.
   o Kicking- asking children to kick on stand is somewhat simple but sometimes when the child separates legs to much propulsion is lost. Pretend to “wrap” the child’s knees together so they keep them closer.

25. Let’s move!
   o “Follow the breadcrumbs” – Now that child lays body flat and kicks place toys about a foot apart on the shelf. Ask the child to look for toys and travel on his/her belly like an alligator to each one. At each one lift head to take a breath (introducing the next skill).
   o “Pizza arms shoot the rocket!” A breaststroke approach to swimming is easier for children to grasp as it is a parallel movement instead of a lateral movement such as freestyle. Demonstrate tracing a pizza (ask for favorite toppings!) then bringing hands together to shoot them out in front of body like a rocket. Repeat!

26. Let’s move!
   o “Pit stop!” as child begins to progress to swimming longer distances place yourself between two points. Ask the child to make a pit stop to catch their breath before swimming to the next step.
   o If child’s body begins become vertical in their water as they swim notice where they are looking. The body follows where the eyes look.
   o “Shark and goldfish” you’re the shark; child is goldfish in order to get to the step across the pool they cannot look at shark otherwise… Nom nom! Keep those eyes down!

27. Take a breath
   o To dive for toys –don’t forget “bottoms up”
   o Breathing back to basic “bobbing apple” using the “walk the plank” have child bounce from bottom floor and as they come up take a breath. Might need assistance to fully get head out of water.
   o “Turtles” either with a picture of a turtle or through demonstration. Show how a sea turtle pops just its head out of the water but the shell (body) stays exactly the same.

28. Last Thoughts:
   o These are just a few techniques to include in your swim lessons but key components are:
   o Play: Have fun with the child in your lesson, find out what they really enjoy by asking questions or if they are too young tread on the side of caution and treat a baby as “slow to warm. “Be confident, yet respectful.
Temperament: Usually by the third 20 minute lesson you should know what kind of temperament the child has.

No two lessons even if the children are the same age/temperament and skill level are the same.

Thank you for your time. Now to the pool!

29. References