NO CHILD TO MISS OUT:
Basic swimming & water safety education
- The right of all Australian children

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Royal Life Saving
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Royal Life Saving Society – Australia works to prevent drowning and facilitate healthy, active lifestyles by equipping all Australians with water safety skills.

There is no one reason Australians drown, so there is no one simple solution. For that reason, our approach needs to reflect the complexity of the range of issues that result in drowning deaths.

To make sure we reach all Australians, whoever they are and wherever they live, we tackle these goals using an all encompassing approach, designed to meet our stakeholders’ diverse needs, beliefs and values.

Royal Life Saving is driven by:

• Innovative, reliable, evidence-based health promotion and advocacy;
• Strong and effective partnerships;
• Quality programs, products and services;
• Continuing as a committed national organisation.

For the past 117 years, Royal Life Saving has worked to harness the strengths of the communities we work with to reduce drowning and turn everyday people into everyday community lifesavers. As a dynamic, charitable organisation, our areas of activity include:

• Advocacy
• Education
• Training
• Health Promotion
• Aquatic Risk Management
• Community Development
• Research
• Lifesaving Sport
• Leadership and Participation
• International Partnerships

Our guiding values are safety, quality, integrity and a humanitarian tradition. Royal Life Saving is active all over Australia. Our branches, members, volunteers, trainers, employees and lifesavers are found in almost all communities. Our approach is inclusive and some of our biggest achievements occur away from large capital cities.

www.royallifesaving.com.au
INTRODUCTION

Royal Life Saving believes it is the right of every child to access a quality swimming and water safety education that includes skills such as general swimming techniques and treading water, survival techniques and strategies, floating and rescue skills. In order to prevent drowning, every Australian child must have basic swimming and water safety skills and knowledge of how to be safe when they are in, on, or around water. Swimming and water safety education differs from basic learn to swim in that it includes a holistic mix of swimming, survival and rescue skills, and water safety knowledge suitable for use in a range of aquatic environments.

Currently in Australia, not all children access this swimming and water safety education. Royal Life Saving believes that a large percentage of children will leave primary school this year without the swimming and water safety skills and knowledge they will need to be safe around water for the rest of their lives. Royal Life Saving continues to identify and address gaps in the provision of swimming and water safety education to ensure the acquisition of sufficient water safety skills by all Australian children as a means to prevent drowning deaths.

The barriers to achieving quality swimming and water safety education for all Australian children are many and varied and include factors such as cost and time to access lessons, access to facilities, insufficient resources and insufficient capacity for instruction for all. These barriers appear to be increasing over time, which indicates that measures are urgently required to ensure children achieve a benchmark level of swimming and water safety education prior to leaving primary school.

To understand more about children participating, and children missing out; the water safety skills currently achieved and potential ways to ensure swimming and water safety education is accessible by all primary aged children, Royal Life Saving undertook comprehensive research to benchmark swimming and water safety education in Australia. This research involved a number of discrete investigations contributing to a greater, more detailed understanding of the factors that influence the current skill and knowledge levels of Australian children in terms of swimming and water safety.

The notion of benchmarking swimming and water safety education was first actioned in 1998 by the Australian Water Safety Council (AWSC) which defined the benchmark as “the ability of a child to attain particular skills (equivalent to Level 4 of the Swim and Survive program) and knowledge compared to children of a similar age” as part of the Australian Water Safety Strategy (AWSS). Responsibility for quality swimming and water safety education for Australian children is not the remit of one single organisation or institution. Many intersecting organisations, sectors and agencies play a role in ensuring full participation. This issues paper: No child to miss out: Basic swimming and water safety education – The right of all Australian children outlines the role of organisations, government and industry in removing barriers and ensuring that no child misses out on gaining these essential skills.
This research was conducted by Royal Life Saving in support of the Australian Water Safety Strategy (AWSS) 2008-2011. The AWSS identified important formative skills and knowledge in swimming and water safety that would aid in drowning prevention, described as a pillar (underlying strategy). The Australian Water Safety Strategy also reinforced the need for further research into effective drowning prevention interventions.

In conducting this research Royal Life Saving sought to quantify and validate perceptions about:

- a lack of information on the swimming and water safety skills and knowledge levels of Australian children;
- a perceived decrease in the number of children accessing learn to swim classes, particularly whilst at school;
- falling achievement levels and concern over consistently high drowning statistics among Australian children.

This issues paper proposes a number of strategies to improve the swimming and water safety skills and knowledge levels of all Australian children.

**Key findings**

**Current participation of children in swimming and water safety lessons**

- It is estimated that commercial swim schools are currently teaching approximately 17% to 24% of children in Australia per annum (2011 estimate).

**Benchmarking achievement**

- The benchmark skills, Level 4 of the Swim and Survive program, are achievable for primary school aged children but are not currently achieved by 100% as required by the AWSC.
- Data collected from 2008 to 2011 in a case study in the ACT indicated that the proportion of children who achieved the benchmark varied from 13.7% in 2008 to 20.5% in 2010, peaking at 25.7% in 2009.
- As children aged they were more likely to achieve the benchmark with 81.3% achieving the benchmark by their thirteenth year of age.
- Case study data from South Australia (SA) school and vacation programs showed that only 8.8% of children who attended these programs achieved the benchmark in the sample.
- Only 42.8% of children who participated in the SA YMCA VACSWIM program in early 2011 achieved the benchmark or above.
- Tasmanian (TAS) Department of Education swimming and water safety program data found just under a third (31.3%) of all children in grades 3 to 6 achieved the benchmark, rising to 68.6% by grade 6.

**Achievement of children from diverse backgrounds**

- Children who identified as indigenous were less likely to achieve the benchmark on average and generally achieved a lower level as they aged (Level 1.6 at age 7.8 years) compared to non-indigenous students (Level 2.4 at age 7.6 years).
- Although children from remote areas were under-represented in the data, when given the opportunity to participate, children from remote areas performed well. The data showed average ability levels increased with the degree of remoteness, from inner regional to remote; however these results dipped slightly when remoteness increased to very remote.
- Children from are classified as major cities performed poorly, achieving the lowest level of proficiency at the oldest age, yet this demographic had a higher number of children achieving Level 4 or above than any other remoteness classification.
- Children not born in Australia were less likely on average to achieve the benchmark, when compared to children born in Australia, other than in the 12 and 13 years age group.
- Children with a greater socio-economic disadvantage were under-represented in the data but this group showed a high proportion of children aged 10-12 years who achieved the benchmark. This shows that when given the chance to participate in swimming and water safety education, children from lower socio-economic achieve well.

**Other factors impacting upon achievement**

- Children who attended private school were more likely to achieve the benchmark compared to children who attended public school.
- Children’s achievement levels increased the more they participated in aquatic activity with weekly aquatic activity having the most measurable effect on a child’s achievement even though, as a group they were on average the youngest in age.
- Children enrolled in vacation style programs out-performed children participating in school programs, by achieving a higher average level at a younger age. Children in the vacation programs were also more likely to achieve the benchmark with 85.4% of these 11 year olds achieving the benchmark. These differences could be due to a number of factors including teacher to student ratios, participation bias different to the population as a whole and more time to enjoy activities as recreation.
Summary of goals

Over the next 5 years, Royal Life Saving believes that action must be taken to improve the swimming and water safety outcomes for all Australian children. According to research, the overarching themes and guiding goals are:

Developing a swimming and water safety standard
- Consolidate the national swimming and water safety standard
- Strengthen an integrated approach to swimming and water safety education

Facilitating achievement of swimming and water safety standard
- Improve access for children of all backgrounds
- Develop the capacity of the swimming and water safety instructor workforce
- Strengthen the capacity of the Australian school sector to provide swimming and water safety education
- Strengthen the role of the aquatic Industry in improving children’s swimming and water safety education

Moving forward
- Enhance capability for review of swimming and water safety education
- Increase parental understanding of their role in influencing children’s swimming and water safety education

Gaps in water safety knowledge nationally
• Analysis of the results of the National Water Safety Quiz identified gaps in knowledge across the CPR, personal awareness and swimming categories of the Quiz. CPR questions were poorly answered in all States and Territories by both genders in all age groups.

Support for holistic swimming and water safety education and national benchmarking
• A survey of 834 swim school managers nationally found strong support for a holistic water safety education that places emphasis on water safety and survival skills such as treading water, survival techniques and strategies, floating and reach rescues. Butterfly was seen as the least important skill for children to learn.
• There was also strong support for the national benchmarking of children’s swimming and water safety achievements with 79% of respondents expressing interest in issuing a National Benchmarking Certificate to children at their swim school that records achievement against the Benchmark.

Issues impacting participation in and provision of swimming and water safety education
• Surveys to industry and anecdotal evidence from providers of swimming and water safety education in Australia have highlighted several barriers to achievement including; distance to water/swimming facilities, cost of lessons/pool entry and access to qualified instructors and pool space.

Importance of data collection and ongoing analysis
• Three years of data collection in the ACT study has identified the value of ongoing data collection and posed further questions, such as what is the optimal frequency of aquatic instruction.
• 91% of all swim school managers surveyed were willing to send data on children’s achievements to Royal Life Saving. This will be an avenue to increase data acquisition and allow further analysis.
Consolidate the national swimming and water safety standard

Recommendations

1. Conduct wide ranging consultation with stakeholders and practitioners to confirm the national swimming and water safety standard.

2. Partner with all key players in swimming and water safety education to devise effective approaches to implement the Standard.

Greater consensus

The current standard for swimming and water safety education is set by the Australian Water Safety Council (AWSC) and prescribes the targets to be achieved in the key areas of swimming, survival and rescue education. The AWSC outlines the minimum competencies to be achieved at completion of primary school education as equivalent to Level 4 of the Swim and Survive program. Greater consensus on this Standard and the actions required to ensure greater implementation are required.

What and by what age?

Some see the Standard set by the AWSC as too lenient, others see it as unachievable. In recent times there has been vigorous debate from some industry practitioners around this benchmark and its impact on minimising the risk of drowning. Opinions range from 25m of efficient stroke technique, to 50m of several strokes including survival strokes with correct technique, to 1,500m of freestyle. Greater consensus on this Standard and the actions required to ensure greater implementation are required.

Stronger evidence

There is a lack of evidence to support assertions made about the standards of swimming and water safety and about the age they should be achieved. There is currently no indication about how many lessons are required for children to become proficient in swimming and water safety. The likelihood is that most children would require a number of lessons over several years to become proficient.

The evaluation of data from a variety of swimming and water safety programs across several States and Territories has shown that the AWSC’s benchmark of Level 4 of the Swim and Survive program is achievable prior to leaving primary school; however it is currently not being achieved by 100% of children.

Further engagement

In order to successfully implement and adopt the standard on an ongoing basis, strong consensus across all States and Territories and within the industry including providers, teachers and government is required. Research has identified support among Australian swim school managers to benchmark children against a national standard in private learn to swim programs. Further engagement in the standard development process in order to generate widespread support from other key stakeholders including education departments, government and the broader aquatic industry is required for greater uptake.

A simplified standard

Support for a swimming and water safety standard would be generated by ensuring the standard is simplified, clearly communicated to stakeholders and is easily implemented. Research at swim schools identified a wide diversity in the number of award levels children were able to achieve, ranging from 0 to 20 levels. In addition, particular skills tend to be taught at different levels by different swim schools. A simplified standard supports the widespread adoption of basic skills to be acquired and would simplify community understanding of requirements and benefits for their children.
CASE STUDY: Proposed national standard

Royal Life Saving proposes that the National swimming and water safety standard be developed and be achieved by all Australian children by the end of primary school, inclusive of the following activities:

- Swim 50m continuous freestyle with correct/efficient technique
- Swim 25m continuous survival stroke of any nature (breaststroke, backstroke or sidestroke)
- Float for 2 minutes
- Perform a survival sequence dressed in swimwear, shorts and a t-shirt
  - Scull, float or tread water for 2 minutes
  - Swim slowly for 3 minutes changing survival strokes each minute
- Throw a rescue flotation aid to a partner at 5 metres distance and instruct the partner to kick to the edge
- Answer questions about dangers in different aquatic environments

Consistent assessment

In order to leverage the benefits of a single swimming and water safety standard, the assessment of children’s achievements against the standard must be conducted consistently. Standardisation of assessment is problematic as assessment of skill is largely subjective, as demonstrated in the pilot project in the ACT which explored assessment of children’s swimming and water safety skills. The pilot project found that there were a number of variables that impacted upon consistent assessment including the instructions given to students, the order in which the skills were tested and when the assessment was conducted (e.g. beginning or end of the lesson).

The inclusion of competency assessment guides will assist in the smooth implementation and consistent assessment against the standard. Consideration should also be given to assessment of skills in open water environments to increase children’s skills and experience in more variable environments.

Ongoing program evaluation

Regular evaluation of the standard and implementation is critical to success, involving strategies employed to ensure inclusion of children from all backgrounds. This could be achieved through access to data and widespread support for the sharing and analysis of data has been expressed by stakeholders, with 91% of swim school managers expressing willingness to share data with the Royal Life Saving on their programs and clients performance.
Strengthen an integrated approach to swimming and water safety education

Recommendations

1. Promote the importance of non-competitive swimming and survival skills and support inclusion in swimming and water safety programs.

2. Promote a more structured and consistent approach to teaching water safety knowledge.

3. Lobby for the re-inclusion of swimming and water safety in the Australian primary school curriculum.

A holistic approach

Royal Life Saving believes that all children should have access to a quality and holistic approach to swimming and water safety education. This approach goes beyond competitive swimming strokes and includes knowledge of: survival strokes and personal survival skills such as treading water, sculling and floating; rescue skills including knowledge of non-contact and dry rescues and personal training experiences of rescue and instruction in basic CPR skills and knowledge.

Knowledge is important

Water safety knowledge is as important as the skills children use in the water. A sound knowledge of when and why to use a particular survival skill or basic rescue technique is as vital as an ability to safely perform the skills. Knowledge about the hazards and risks of aquatic environments and how to ensure personal safety and that of others is an important component not always taught as part of swimming education.

Data collected in the pilot year of the National Water Safety Quiz identified several areas where Australian children’s knowledge is lacking. These include CPR, personal awareness (including cold water safety and flooding safety topics) and swimming (includes survival stroke questions).

Support from swim schools

The survey of swim school managers found strong support for a holistic approach to swimming and water safety education that includes survival strokes, rescue skills and water safety knowledge. The swim school managers felt that knowledge about safety at specific aquatic environments, the ability to tread water, survival techniques and strategies and knowledge of aquatic hazards were important elements. Skills such as deep water exits, knowledge about water safety signs and an ability to float were also viewed as important for children. Butterfly was rated as the least important skill for children to learn.

Swim school managers also supported additional instructional areas including; CPR skills, use of lifejackets, the Heat Escape Lessening Position (HELP) and knowledge of improvised rescue techniques using everyday items such as buckets, balls and brooms would be advantageous.
CASE STUDY: The National Water Safety Quiz

The National Water Safety Quiz has been developed by Royal Life Saving as a tool to evaluate the water safety knowledge levels of Australian primary school children. The Quiz formed part of the broader benchmarking research that Royal Life Saving has been undertaking.

The Quiz has been designed to be bright, colourful, engaging and fun for primary school aged children. It has been designed as an online Quiz so that it can be used across the country, is able to be assessed immediately (correct answers) and has a random component so that no two quizzes are the same (thus allowing children to try the quiz multiple times without getting bored). The Quiz is a valuable tool to support classroom based water safety education and to complement water based swimming and water safety lessons.

The Quiz can be accessed online at www.watersafetyquiz.com.au.

Water safety skills delivery
Observational research was conducted by Royal Life Saving and AUSTSWIM at a range of swim schools across New South Wales. The aim of the research was to gain a snapshot of how frequently, if at all, essential water safety skills were taught. Of the 34 lessons observed at 14 swim schools, 82% were found to not include the water safety skills of safe entries and exits, floating, sculling, treading water, rescue skills and survival strokes 3. Where these skills were included in a lesson, they were often taught as part of a progression towards competitive strokes, for example rotational skills such as somersaults as a progression of learning tumble turns rather than a focus on using rotational skills for the purposes of safety in the water 3. Where water safety skills such as sculling and treading water were taught, this was generally found to be at swim schools that incorporated water safety into weekly lessons 3.

When swim school managers self-reported the skills taught at their swim schools, a number of schools did not include skills considered by Royal Life Saving to be important for holistic swimming and water safety education for children. Water safety skills that were least likely to be included were compact jumps, survival swimming in clothes, throw rescues, reach rescues and sculling feet first on the back 8.

Integrated water safety skills and knowledge
Royal Life Saving believes that water safety skills and knowledge should be integrated throughout a program and be evidenced in every lesson rather than included as a single lesson. Many swim schools reported that they conduct a water safety week in which all classes cover the required water safety content. However, anecdotal evidence suggests that these are the lessons that are most likely missed by children 8, which also points to the need for parents to understand and reinforce the importance of water safety to children and their swim schools.
FACILITATING ACHIEVEMENT OF SWIMMING AND WATER SAFETY STANDARD

Improve access for children of all backgrounds

Recommendations

1. Develop and implement strategies to improve access for children from Indigenous, Culturally and Linguistically Diverse, and low socio-economic backgrounds.

2. Develop and implement strategies to improve access for children from rural, remote and very remote areas.

3. Strengthen the provision of vacation and school based programs, with strategies targeting access and equity opportunities.

Participation rates

The number of Australian children who participate in learn to swim activities nationally is unknown. Based on results from this investigation, Royal Life Saving believes that approximately 1 in 5 children are unable to swim the length of an Olympic swimming pool by the time they leave primary school.

Using data from a survey of swim school managers and Australian Bureau of Statistics population estimates, it is thought that swim schools currently only reach between approximately 17% (741,000) and 24% (1 million) of all Australian children under 14 years (4.2 million) per annum.

This is supported by data from the ACT and SA case studies that indicate only a proportion of the population participate in formalised learn to swim activities. Whilst the ACT data covers approximately one third of children in the ACT, it is difficult to establish whether the proportion of remaining children are in non-participating schools, can already swim or avoid the program due to factors such as cost.

Royal Life Saving South Australia yielded data on 18,080 children participating in the YMCA and RLS South Australia vacation programs and the school based program conducted by the Department of Education and Community Services which is run in 533 schools. The picture for the private learn to swim market is unclear; hence it is impossible to estimate participation rates. This participation data and number of schools running swimming and water safety programs suggests a significant proportion of the estimated 153,392 children aged 5-12 years in South Australia are accessing swimming and water safety instruction.

What water safety achievement levels are children achieving?

Falling swimming and water safety achievement levels in children have been an industry concern for some time. Many industry and community members point to a decline in the number of children engaging in formal swimming programs, as well as a decline in the skills they are able to demonstrate.

Data collected during this benchmarking project has identified that the AWSC’s benchmark of 100% of children achieving Level 4 of the Swim and Survive program prior to leaving primary school is not currently achieved in any of the programs studied.

Tasmanian data found that 31.3% of children in school grades 3 to 6 achieved the benchmark of Level 4. This rose to 68.6% of all children in Grade 6 achieving the benchmark. Data collected over 3 years in the ACT found that 76.6% of 12 year olds and 81.3% of 13 year olds who participated achieved Level 4 or above. Where data was available on individual candidates in South Australia (Royal Life Saving SA Branch program only) just 8.8% (426) of children achieved Level 4 or better. The three data sets indicated females were more likely to achieve the benchmark than were male children.
CASe STuDy: Swim and Survive Fund

Sadly, more than 50 children between the ages of one and 17 drown in Australia every year, highlighting the importance of swimming and water safety education for all Australian kids. But unfortunately, while many Australian children are learning these skills, many don’t have the opportunity. Children from indigenous, culturally and linguistically diverse, and regional and remote communities, as well as those from lower socio-economic areas, often miss out on learning how to Swim and Survive. These children are our focus.

UNCLE TOBYS and Royal Life Saving Society – Australia are proudly working together to promote the importance of water safety education. Through the Swim and Survive Fund, we are aiming to provide Swim and Survive lessons to children in the communities listed above.

The Swim and Survive Fund provides money to pay for lessons for financially disadvantaged children. The Fund aims to prevent drowning by increasing Awareness, Access, Pathways and Research and aims to provide 100,000 lessons to 10,000 children over the 2011/12 season.

Children not accessing swimming and water instruction

Anecdotal evidence has long suggested that children from Indigenous, Culturally and Linguistically Diverse (CALD), low socio-economic backgrounds and children from rural and remote areas, often miss out on receiving even a basic level of swimming and water safety instruction.

It can be asserted that indigenous children are under-represented in the ACT swimming and water safety program. The ACT data identified that just 0.75% of the 7,830 children participating in the program over several years, identified as of Indigenous descent. This compared to 1.2% of the ACT population identifying as Indigenous and in light of a general increase in population growth of Indigenous people in younger age groups. Those participants who identified as Indigenous were less likely to achieve Level 4 and above, on average, than non-indigenous participants. Indigenous students generally achieved a lower level of achievement at an older age (Level 1.6 at age 7.8 years) compared to non-indigenous students (Level 2.4 at age 7.6 years).

Participant’s country of birth was used in South Australia as a proxy for CALD status and showed that children who were born outside of Australia were less likely on average to achieve Level 4 or above than children born in Australia. However, these figures are somewhat conflicting when reflecting on the 12 and 13 years age group where achievement levels are generally higher. Children born outside of Australia also achieve higher levels at older ages. This could be attributed to the role that vacation programs play in providing pathways for CALD children who may have missed early opportunities for learn to swim, but who take full advantage once it is offered. This highlights the need to implement strategies to ensure that children born overseas have access to swimming and water safety lessons in order to bring them up to the same level as their Australian born peers.

Conversely, children with a greater socio-economic disadvantage had a high proportion of children aged 10-12 years who achieved the benchmark. It can be seen from these results that when given the chance to participate in learn to swim activities, children from low socio-economic backgrounds can and do achieve the benchmark, in some cases performing better than their peers from higher socio-economic areas. Similarly, a child’s average achievement level increased as remoteness increased, from inner regional to remote, however dipped slightly for children living in very remote areas, indicating these children require targeted assistance to achieve the benchmark.
Develop the capacity of the swimming and water safety instructor workforce

Recommendations

1. Increase the number of teachers (at primary, secondary and tertiary level) who hold swimming and water safety qualifications by including qualifications in swimming and water safety instruction in all teaching degrees.

2. Improve the access of swimming and water safety teachers to resources and professional development in swimming related areas. Regularly evaluate the skills and capacity of the instructor workforce to highlight and address areas of concern.

3. Increase the availability of quality instructors of swimming and water safety in rural and remote areas by partnering with organisations such as AUSTSWIM to develop systems of targeted recruitment.

4. Increase the number of instructors of swimming and water safety from Culturally and Linguistically Diverse and Indigenous backgrounds by partnering with organisations such as AUSTSWIM and explore options such as scholarships and mentoring.

Address instructor shortages

A perceived shortage of qualified instructors of swimming and water safety is seen as a barrier to accessing programs in many communities across Australia. Addressing this shortage is essential to ensuring that all people have the opportunity to acquire the knowledge and skills they need to be safe in the water. Shortages have long been identified in regional areas, during peak times in capital cities and in providing instructors from various cultural backgrounds to reflect community needs.

Expansion of the instructor workforce through recruitment and retention strategies should be supplemented by proactive programs that target recruitment in populations not currently fully represented in the instructor cohort. Successful approaches have been implemented by AUSTSWIM to proactively support regional areas, as well as community development approaches delivered in partnership with Royal Life Saving that have increased the number of instructors from indigenous background in ACT and NT, as well as in CALD communities in NSW and Victoria.

Supporting the instructor workforce

It is difficult to estimate the number of instructors of swimming and water safety currently working in the Australian industry. The peak industry body, AUSTSWIM accredits over 10,000 newly trained teachers annually. It is difficult to ascertain how many remain active in the industry and for what period. The AUSTSWIM reaccreditation process, triggered tri-annually and contingent on professional development criteria reaccredits over 3,500 teachers each year.

The deregulation of the training market in this area has resulted in registered training organisations (RTOs) offering competency based training in skill sets approximating the industry accepted format and content delivered by AUSTSWIM. It is not known how many teachers complete this training, and don’t accredit with AUSTSWIM whilst remaining active in the industry.

A targeted expansion of the swimming and water safety instructor workforce would be useful in addressing current gaps in swimming and water safety provision and ensuring disadvantaged children do not miss out.
Needs of rural and remote areas
A survey of rural and remote teachers of swimming and water safety found that increasing access to teachers of swimming and water safety is an important strategy in reducing drowning in Australia, particularly in rural and remote areas where water safety programs and services are currently limited or unavailable due to a shortage of instructors.

The survey also found that access to and cost of professional development, working conditions (such as pay, hours and length of season which is also linked to the availability of year round pools in rural and remote areas), the age of infrastructure and availability of teaching space were issues impacting upon the recruitment and retention in rural and remote areas.

Royal Life Saving in collaboration with AUSTSWIM believes that strategies should be employed to address these issues. Financial assistance in the form of subsidies and scholarships for rural and remote instructors, as well as flexible options including online delivery for personal development, are approaches worthy of consideration.

More Indigenous and CALD instructors
A survey of swim school managers across Australia found that only 2% of respondents identified as Aboriginal and Torres Strait Islander and only 7% could speak a language other than English (proxy for Culturally and Linguistically Diverse). Similarly, a survey of rural and remote instructors identified equally low numbers of instructors who spoke a language other than English and an extremely low number of respondents who identified as Indigenous.

Targeted recruitment of Indigenous and CALD instructors is needed and strategies that could be adopted include provision of scholarships or other forms of financial support for Indigenous and CALD instructors. A mentoring program that provides support for teachers of swimming and water safety from Indigenous and CALD backgrounds should also be considered.
Strengthen the capacity of the Australian school sector to provide swimming and water safety education

Recommendations

1. Conduct research and engage stakeholders to identify barriers to the provision of swimming and water safety education by the school sector and develop strategies to address those barriers.

2. Examine public and private school models of delivery to identify strengths and weaknesses and possible alternative ways of supporting current provision.

3. Increase capacity of the education system through a variety of models including expanding the volunteer workforce, increasing teacher skills and confidence and increasing funding.

4. Facilitate collaboration between the learn to swim industry and school based learn to swim programs.

The role of the school sector
The education system in Australia has a role to play in providing children with a quality education and the skills they need to lead a healthy and happy life. Research has shown that schools represent an important setting for influencing children's physical activity behaviour and primary schools have an ideal opportunity to encourage the development of positive attitudes and practices towards leading an active lifestyle.

The benefits of the lifelong impact that participation in physical education has in the primary school years and the valuable skills a swimming and water safety education are significant. In addition, the provision of skills to aid in protection from drowning throughout a lifetime strongly argues for inclusion of swimming and water safety instruction in primary school curriculum.

School sector barriers
There are known barriers to the provision of frequent and quality instruction in swimming and water safety within the primary school system in Australia. A survey of primary school teachers and informal engagement with stakeholders from State and Territory Departments of Education identified barriers such as a lack of qualified staff (to undertake both instruction and supervision of aquatic activity), cost (of pool entry and transportation to the pool), a lack of time within an already crowded curriculum, a lack of access to water space and the need to take a risk management approach as impacting on swimming/survival capability.

Whilst there are risks associated with undertaking aquatic activities at primary school, this risk is low according to figures from 2008, with only five recorded drowning deaths during school based aquatic activities between 1963 and 2000. Compared to the lifelong benefits, these risks do not warrant the exclusion of swimming and water safety instruction and aquatic activity.

Public and private programs
Data from South Australia found differences in achievement rates in children in vacation programs and those in school based programs. The children in the vacation program achieved a higher average level at a much younger age and were more likely to achieve Level 4, than those in the school based program. This peaked in the 11 years age group with 85.4% of children achieving Level 4 or above in the vacation program.

Rather than illustrating disparities in effectiveness, the key issue here is one of program role. The school program tends to focus on getting more children to an earlier end point, whilst the vacation program caters to all ability levels and provides a pathway that extends beyond level 4 and further into basic lifesaving.

Data collected across three years of the ACT learn to swim program found that children attending private schools achieved a higher average level than those attending public schools. Children attending private schools were also far more likely to achieve the benchmark of Level 4 or above, with 42.4% of private school children achieving Level 4, compared to 19.0% of public schools students.

As public models of delivery are generally more accessible to the general population, support must be given to the public education system to improve capacity to provide quality swimming and water safety education programs by expanding the volunteer workforce, increasing teacher skills and confidence and increasing funding for swimming and water safety instruction.
**Best practice models**

Data collected in the ACT case study indicates the value of an ongoing program of swimming and water safety instruction with average achievement levels increasing over the three years of the program from Level 2.0 in 2008 to 2.4 in 2010, peaking at level 2.6 in 2009. The ACT data also highlights that new schools to the program achieved lower averages than schools who had participated in the program in the previous year ⁴.

A barrier to the achievement of swimming and water safety skills and knowledge are the number of lessons available and lesson cost. Royal Life Saving believes that school based programs can reach an economy of scale as programs grow, including negotiating better per head cost for entry to pools, use of buses to transport children and employment of swimming and water safety teachers.

The Tasmanian Department of Education program highlights the strengths of a compulsory program for years 3 to 5, with children enrolled in the Tasmanian program more likely to achieve the benchmark than children in ACT or South Australia. The Tasmanian model identifies the benefits of providing a basic level of instruction to all children within the public school system, thereby reaching a high number of children at a stated cost of $1.60 per lesson per child ⁶.

**Increased collaboration**

A survey of swim school managers examined delivery models and found that 84% of swim schools align their delivery to the school term which operates in their State or Territory. This alignment is thought to allow parents to plan activities, as well as provide for vacation programs or shutdowns during school holidays ⁸.

Royal Life Saving will explore and facilitate options for increased collaboration between the learn to swim industry and school based learn to swim programs to enhance the swimming and water safety skills of all Australian children and assist in addressing current gaps in delivery among specific populations.

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**CASE STUDY: Tasmanian Primary School Swimming and Water Safety Program**

The Tasmanian Primary School Swimming and Water Safety Program is coordinated by the Tasmanian Department of Education and it is mandatory that all government schools in Tasmania participate in the program.

The Tasmanian Department of Education ensures every child in State schools has an equal opportunity to participate in quality swimming and water safety instruction. Each student in years 3, 4 and 5 in all primary schools has an opportunity to participate in ten consecutive periods of Swimming and Water Safety annually.

Students take part in a 10-day program at Government owned and private swimming pools. As well as teaching students to swim, the program also develops an understanding of water safety, survival and swimming practices to ensure that water based activities are safe and enjoyable. All students are aiming to achieve the Tasmanian implementation of the National Benchmark which is equivalent to Level 4 of the Swim and Survive program ¹⁶. This model could be duplicated by other States and Territories.
Strengthen the role of the aquatic industry in improving children’s swimming and water safety education

Recommendations

1. Enhance the role of private swim schools in addressing gaps in the provision of swimming and water safety education to Australian children.

2. Investigate mechanisms to improve alignment of swim school and aquatic facility tender processes to community swimming and water safety targets.

3. Promote community benefit schemes such as the Swim and Survive Fund to facilitate access to swimming and water safety education for children of all backgrounds.

An industry role

The Australian aquatic industry has a significant role to play in improving the swimming and water safety education of all children. The Australian aquatic industry is diverse with models ranging from local government, state government, non-government organisations and private business all playing a role in providing swimming and water safety education.

As in all markets, the industry provides a range of products that vary in focus, price and targeted consumer segments. From the perspective of this research, these services can be seen to be positioned along a continuum; at one end comprising of teaching competitive swim strokes in a pathway to the sport of swimming contrasting with a total focus on water safety and lifesaving skills at the other end.

Whilst recognising the need and consumer interest at either end of this continuum, the challenge that the industry faces in supporting the general principles of a broad based, inclusive swimming and water safety education is to focus on the central position; where efficient and functional stroke development is balanced with the development of skills in survival strokes, basic rescue and water safety education.

Industry feedback has identified issues such as a decline in school and vacation programs, facility driven holiday and school focused programming to supplement or replace these gaps, and ongoing concerns at the cost of providing subsidised programs to the education or government sector at the expense of more profitable activities.

Industry related barriers

Cost and the availability of water space is the barrier to swimming and water safety education most commonly identified by parents and the school sector. Research found that entry and lesson costs remain prohibitive for many parents and schools, and as a result, swimming and water safety lessons are often replaced by less expensive and more accessible sports and hobbies by schools and by parents.

Industry stakeholders too, cite access or cost of water space as a common problem. The owners of water space; private enterprise, local government and facility managers, point to rising costs for water, energy and labour, therefore reinforce the need to charge reasonable commercial rates for access. Demand also plays a role, with competition for water space from a range of private and not for profit activities driving up prices.

Local government, the largest owners of water space, cite increasing costs, community demands and rate pressure as challenges to maintaining swimming pools in their jurisdictions. Many have moved to private tender of services as a solution to this management complexity. Models differ from the management contact for the entire operation of the swimming pool, to outsourcing of coaching or lifeguard services. Local government always points to ongoing costs of major maintenance programs for ageing and outdated facilities.
Addressing these barriers

It is clear that industry related barriers are complex and require urgent rectification. Investment in infrastructure to upgrade or reconfigure swimming pools, adjustments to the tender process to allow for higher rates of community access, and incentives for small business operators are often cited solutions.

Royal Life Saving believes that further investigation into the state of infrastructure of swimming pools across Australia, and particularly in regional and remote areas is needed to guide future investments. Whilst many councils and some schools, particularly those in the private sector, secured funds from the 2009 economic stimulus package, and other Federal and State government funding programs, a deeper understanding of infrastructure needs and coordination of this issue across jurisdictions may enhance improvements in the future.

Royal Life Saving cites improvements to the tender instruments used by local government to outsource swimming pool management as an area requiring some focus. Many councils are known to build community and school access, as well as the provision of services to needy populations into the tender instruments.

The cost of energy and water to run and maintain swimming pools are increasing and placing pressure on over-stretched management budgets. Whilst work may be undertaken to encourage suppliers to offer subsided schemes, real gains can only be made by addressing energy use by facilities. Moves to solar energy, more energy efficient design solutions and water retention and reuse systems are more likely to provide longer term solutions.

Governments and private organisations should also carefully consider the construction of new pools and ensure these facilities are located where they are needed most. This could include more investment in aquatic infrastructure in rural and remote areas and in areas servicing low socio-economic populations.

CASE STUDY: “Drowning from fees” by Newcastle Herald newspaper

The Newcastle Herald newspaper reported that Newcastle City Council has had to raise entry fees to city swimming pools by up to 25% to cover increased electricity and water charges. Newcastle City Council increased its school concession prices from $2.90 to $3.70 and group entry prices from $2 to $2.50 under its latest round of rises.

Dudley Public School Principal Peter Adam said the relatively low $2.40 entry cost to Charlestown pool for annual intensive swimming classes added up to $24 a student over the 10 day scheme. “We organise parents transport because if we had to put a bus on top of that it would just be too expensive”, Mr Adams said.

Mr Adams said that pool entry costs were not based on time spent in the facility. “They’re only there for an hour but if they were there all day it would still only be $2.40.” He says that swimming is a critical life skill and the majority of parents take up the school swimming program as they are appreciative that their children receive the opportunity to learn these important skills.
Enhance capability for review of swimming and water safety education

Recommendations

1. Royal Life Saving to expand its benchmarking program to collect and analyse program data in partnership with industry providers.

2. Exploration of the feasibility of issuing a standardised National Benchmarking Certificate.

Data collection and analysis

The collection and analysis of data is important in identifying strengths and weaknesses of current and future provision models, and to allow comparisons of different models and achievement levels of different ages and populations over time.

Data collection and analysis on achievements in swimming and water safety education has been conducted in case studies in ACT, SA and TAS, with ongoing data collection agreements in place in the ACT and a commitment to improving data collection in South Australia.

This research across three States and Territories has allowed Royal Life Saving to explore three different models of data collection and learn from the strengths and weaknesses of each. The ACT model uses one organisation to collect, enter and clean the data and provide it in a suitable electronic format to Royal Life Saving for analysis. The TAS model is similar whereby data is collected by the aquatic unit of the Department of Education and provided on a school/region basis, and provided electronically.

The South Australian model saw three separate providers of learn to swim in the State sharing data in various forms, ranging from paper-based individual records, to electronic records of numbers of participants by categories such as age and gender and level achieved and a base number of participants in particular programs. This range of data allowed different levels of analysis to be undertaken but also highlighted the need for improving data collection and the provision of individual records containing base variables for all children to Royal Life Saving to allow a more complete analysis to be conducted.

Royal Life Saving was unsuccessful in its attempts to secure data from private learn to swim sector although many expressed interest in participation in the research. Exploring the achievement and course provision patterns with a range of private learn to swim program will enhance our understanding of the current and future role this sector may play.

What data is collected?

There are a number of basic variables required to be able to assess the achievement of a particular learn to swim provider. These include participant gender, age, level achieved/or competency (yes or no) on a set of skills, residential postcode and State of residence. These variables are vital to effective analysis.

The three year data collection project in the ACT has highlighted the benefits of collecting additional information on research questions, such as frequency of aquatic activity, interaction with different aquatic environments in the last 12 months and home pool ownership. The data collected allows researchers to examine whether these variables have an impact upon achievement of swimming and water safety skills and knowledge competencies.

Commitment to sharing data

Research conducted into the attitudes of swim school managers generally identified a strong interest in sharing data with Royal Life Saving on children’s achievements to assist in evaluating Australian children’s achievements in swimming and water safety. This will enhance Royal Life Saving’s ability to work with swim schools, primary schools, State and Territory based Departments of Education and information technology specialists to further explore the most effective means of collecting appropriate information on swimming and water safety skills and knowledge attainment.

Industry benefits

An ongoing process of data collection and analysis has many implications for learn to swim programs. Preliminary research conducted by Royal Life Saving has highlighted weaknesses in data collection and resulted in improved systems over time, particularly in the ACT where the number of variables collected, quality of data collected and ease of access and analysis has greatly improved over time.

So too, research in South Australia has identified weaknesses in data collection and has resulted in partnerships to strengthen data collection from three providers of learn to swim in South Australia, Royal Life Saving Society South Australian Branch, YMCA and the South Australian Department of Education and Children’s Services (DECS).
CASE STUDY:  
THREE YEARS OF DATA COLLECTION IN THE ACT – WHAT HAVE WE LEARNT?

The process of data collection over the three years in the ACT has shown the benefits of quality data. Data collection has improved over time through the refinement of the collection tool (enrolment form) and the storage method (a dedicated swim school database).

An increase in data quality allows improved analysis and it is important to continue to collect and analyse data to evaluate changes over time and draw conclusions from larger pools of data. Ongoing data collection in this project will allow researchers to evaluate the participation rates and skill levels of participants in the program over time to identify and address any gaps in the program, such as particular groups that may be missing out on instruction or may be underachieving in comparison to others.

This ongoing data collection program has also identified that data needs to be better collected on Culturally and Linguistically Diverse participants (CALD), including modification of the enrolment form to ensure this information is better captured in the future.

It has also shown the value of collecting data on broader research questions that may have an impact on achievement of swimming and water safety skills, such as frequency of aquatic activity in the previous 12 months and home pool ownership.
Increase parental understanding of their role in influencing children’s swimming and water safety education

Recommendations

1. Improve the awareness of parents of Australian children of their role in improving their children’s swimming and water safety skills and knowledge.

2. Conduct further research into the impact of recreational swimming and frequent contact with water on the acquisition of swimming and water safety skills.

3. Produce promotional and instructional materials aimed at parents/carers and grandparents outlining ways they can contribute to children’s swimming and water safety skills and knowledge.

4. Develop programs/resources to educate parents and carers about what they should expect their children to achieve and the importance of non-competitive swimming and survival skills.

Reinforce the role of parents and carers

Parents, carers and grandparents, can and do play an important role in influencing and strengthening the swimming skills and water safety knowledge levels of children in their care. Parents are the primary funders of swimming and water safety education. They play the key role in enrolment and program selection, and in working through school boards and parent associations to influence school policy and curriculum activities. It is clear that more must be done to equip parents with information and understanding to support program choices.

Maintain commitment

Research has found that the more frequently a child interacts with the water, even in a recreational setting, the more likely they are to retain or improve their swimming and water safety skills year to year. Data collected in the ACT found that children’s achievement levels increased the more they participated in aquatic activity with weekly aquatic activity having the most measurable effect on a child’s achievement, regardless of the child’s age.

The impact of frequent aquatic activity on achievement levels is also demonstrated by the data that shows that children with a home pool were more likely to achieve a higher swimming and water safety level than those children who did not have access to a pool at home. Similarly, children who had visited aquatic venues within the last 12 months and children who participated in private or after school lessons were also more likely to achieve a higher average level at an earlier age (on average) than those who did not.

Benefits of regular aquatic activity

By interacting with children in the water, not only does it improve the fitness of children but also helps them practice skills they have learnt through traditional swimming and water safety lessons. Anecdotally, teachers have highlighted the clear difference in skill level at yearly swimming and water safety lessons between children who have been in the water between lessons, and those who have not. In addition, children that swim more frequently were perceived to be able to maintain or increase their skills when compared with and children that had not practiced the skills they gained in the previous year.

Regular aquatic activity also has been found to have positive effects on children beyond purely fitness and skills. Research has found that physical activity during childhood has positive impacts upon social, psychological and physical wellbeing. Research has also found that the primary school years are the most appropriate time period for children to learn and refine their motor skills, which are considerably more difficult to learn during the adolescent years.
Modelling safe behaviour

Parents and carers can also play an important role in improving children’s water safety knowledge by modelling safe behaviours around aquatic environments and discussing water safety rules and safe behaviours with their children and others in their care.

Children mirror behaviours they witness and parents and carers can set the example of safe behaviour around water. The Royal Life Saving Keep Watch program advocates water awareness as one of the key steps in a raft of strategies to prevent child drowning. Not only is this about physical contact with water, but also includes introducing new or unfamiliar aquatic locations to children by discussing potential dangers and putting rules in place when visiting different aquatic environments, including around the home.

Competing interests

Research conducted in ACT found that there may be different objectives and expectations among providers, parents and the school system. Expectations of parents and carers around the perceived value of competitive swimming strokes, perfect technique and lap swimming places pressure on learn to swim providers to focus on these skills to the detriment of survival skills, rescue skills and water safety knowledge.

Education of parents and carers is required to advocate for the benefits of a holistic swimming and water safety education that includes survival skills, non-competitive swimming strokes, rescue skills and water safety knowledge and the role this plays in helping to prevent drowning.

CASE STUDY: Parental perceptions of toddler water safety, swimming ability and swimming lessons

Research conducted by Moran and Stanley in New Zealand examined parental perceptions on the role of toddler swimming ability and pre-school swimming lessons in drowning prevention. Using a self-administered questionnaire, the attitudes of parents of toddlers attending early childhood centres were compared to the attitudes of parents of children enrolled in swim schools.

The research found that a higher number of swim school parents believed that swimming lessons were the best way to prevent toddler drowning, that toddlers could learn to save themselves if they fell into water and that it was better to develop swimming ability rather than rely on adult supervision.

The survey found that many parents, regardless of whether their children were enrolled in swimming lessons or not, have a limited understanding of the nature of toddler water safety. The research recommended that swim schools reiterate the importance of close adult supervision of toddlers around water to parents, as the survey found many parents had an overly optimistic view of the role of swimming ability and pre-school swimming lessons in drowning prevention.
CONCLUSION

This research, titled No child to miss out: Basic Swimming and Water Safety Education – The right of all Australian children was conducted by Royal Life Saving in support of the Australian Water Safety Strategy (AWSS) 2008-2011.

The AWSS identified important formative skills and knowledge in swimming and water safety that would aid in drowning prevention, described as a pillar (underlying strategy). The Australian Water Safety Strategy also reinforced the need for further research into effective drowning prevention interventions.

In conducting this research Royal Life Saving sought to quantify and validate perceptions about; a lack of information on the swimming and water safety skills and knowledge levels of Australian children; a perceived decrease in the number of children accessing learn to swim classes, particularly whilst at school; falling achievement levels and concern over consistently high drowning statistics among Australian children.

This issues paper has proposed a number of strategies to improve the swimming and water safety skills and knowledge levels of all Australian children. These strategies have been presented as goals and include; Consolidating the national swimming and water safety standard, Improving access for children of all backgrounds, Increasing the capacity of schools, and increasing parental education and understanding of their role.

This issues paper seeks further views and perspectives from across Government, the industry and community representatives. These views are vital to shaping future drowning prevention policy, further research and influencing the nature of swimming and water safety education throughout Australia.

Royal Life Saving believes it is the right of every child to access a quality swimming and water safety education that includes skills such as general swimming techniques and treading water, survival techniques and strategies, floating and rescue skills. Until we can be certain that no child is missing out, we will continue these and other efforts to investigate, propose and implement policy and programs that seek to change this situation.

REFERENCES

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