



Issues Paper

Safety of Aquatic Activity at Primary Schools in Australia:

An identification, summary and analysis of legislation, guidelines and policies relevant to teachers, supervisors and students

Executive Summary

This paper identified, summarised and analysed the relevant legislation, guidelines and policies that relate to aquatic based activities at primary schools within Australia and the safety of these activities for teachers, supervisors and students.

Legislation, guidelines and policies are tools that can assist in creating environments that are safe for conducting aquatic based activities. The Australian Water Safety Council's National Water Safety Plan 2004-07 (NWSP) recognises that regulation, particularly legislation, can play an important role in preventing drowning deaths and promoting water safety (Recommendation 17) and it is recommended that regulatory documents meet best practice and be consistent throughout Australia.

The review of Australian State and Territory legislation in this issues paper found employers and principals have legal obligations to ensure the health and safety of students and supervisors, to provide information, instruction and training to employees, to protect employees from hazards, ensure safety of third parties and provide first aid kits and equipment. It should also be noted that there is a legal obligation in every State and Territory to ensure that people in specific child-related occupations undergo a 'working with children' check. This ensures that employees do not have any convictions for crimes against children or relevant crimes against adults and aims to ensure a safe environment within which children can be educated.

The review of Department of Education policies and industry guidelines in this issues paper found that policies and guidelines on aquatic activity and excursions are also in place in all States and Territories. These policies aim to improve safety and assist staff and principals in fulfilling legislative responsibilities. Direction provided by Departmental policies includes supervision ratios, minimum qualifications for instructors, venue requirements (such as water depth) and health and safety measures (such as collecting medical information, assessing student ability and employing buddy systems).

A review of excursion policies also identified cost and safety issues associated with accessing aquatic locations. As schools often access aquatic locations outside school grounds, an excursion is therefore

conducted. The need to conduct an excursion can impact upon the choice of venue, safety of staff and participants and may require students to pay in order to participate.

The analysis of legislation and policies in this paper found that the language in some documents was unclear and inconsistent. To ensure the safety of staff and participants a risk assessment should be conducted prior to the activity being undertaken and this requirement should be reflected in State and Territory Department of Education policies and guidelines.

The examination of a legal case (Taylor) identifies the drastic turn of events when failures in safety result while undertaking aquatic activity. Failures identified in the case were: a lack of a risk assessment, inadequate levels of supervision and a poor safety system that led to the drowning death of a Department of Education employee whilst undertaking school based aquatic activity.

From the review of legislation, guidelines, policies and case study, there is no clear description in the documentation of the process of communicating the existence and content of relevant documents from the Department of Education to school principals to teachers. Where appropriate policies exist, these should be communicated in a systematic manner ensuring all are aware of and comply with their content. Further to this, relevant information should be communicated to all people involved in school based aquatic activities and not be limited to school staff.

The literature review found that swimming and water safety are an important part of a child's education and have wider health and social benefits beyond water safety. However school based aquatic activity should be conducted in a safe environment to minimise risks to the health and safety of supervisors and participants.

Following the identification, summary and analysis, it was determined that there are three key areas where improvements could be undertaken to improve the safety of school based aquatic activity:

Policies/Legislation/Guidelines

- All Department of Education policies and guidelines relevant to school based aquatic activity should be strengthened as follows to:
 - Clearly reflect all legislative duties of aquatic activity supervisors.
 - Ensure evidence where available informs the development and regular review of policies and guidelines.
 - Require a risk management approach to aquatic activities be taken.
 - Regularly review and monitor policies and guidelines
 - Develop a plan to work towards national consistency in aquatic activity policies for all schools.

Communication

- All school based aquatic policies and guidelines are widely promoted to school staff and key participants (including volunteer supervisors, aquatic centre staff, swimming instructors and aquatic safety organisations).

Water Safety

- All Australian children must be provided with the opportunity to learn basic survival and swimming techniques.
- Appropriate levels of funding are provided to ensure that all primary school students receive quality education in swimming and water safety.

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Introduction

In Australia, drowning is currently the fourth largest cause of unintentional death ¹ and occurs in people of all ages. Children aged 5-14 years have the lowest rate of drowning death in Australia ² and it is believed that learning to swim and water safety skills in this age group are important drowning prevention strategies and may explain why the drowning rate is so low ².

In 2004, the Australian Water Safety Council (AWSC) and associated State and Territory water safety groups, created the National Water Safety Plan (NWSP) 2004-07. Education was identified as a priority and the AWSC states that quality water safety education should be made available to every Australian. The NWSP also aims to establish water safety competency and success targets to appropriate age and developmental levels for all Australian children. The NWSP recommends that all teachers of swimming and water safety be required to hold accreditation that recognises initial training, ongoing demonstration of current competence, professional development and safety skills ¹.

The AWSC believes that water safety education and learning to swim are a vital part of a child's education. As an island continent, much of the population enjoys swimming and participating in other aquatic activities on a regular basis and a wide variety of aquatic locations are accessible to the public ³. Ensuring that all children can swim and possess knowledge of basic water safety skills, are important factors in maintaining a child's health and safety around the water ¹.

This paper recognises the importance of equipping children with swimming and water safety skills and the need to ensure that this education is undertaken in a safe environment. This paper therefore aims to examine the legislative and regulatory environment which relates to aquatic activity at primary schools in Australia and consider the issues affecting the safety of these activities from both the supervisor and student perspective. The safety issues associated with aquatic activity at primary schools are not only about the risk of drowning but also the risk of injury associated with aquatic activity.

This paper focuses on primary schools as this age group (approximately 6-12 years) is when key skills are taught. The Australian school system (Appendix 1) is 13 years in length, starting with a preparatory year followed by 12 years of primary and secondary schooling ⁴. Primary schooling in Australia is generally between 6 and 7 years in length and during these years key foundation learning takes place (Appendix 2) in all subject areas (particularly reading, writing and arithmetic) that form the basis of higher school education ⁵. During the primary school years there is also a program of aquatic activity and water safety that is integrated into the curriculum (Appendix 3).

Approach to Safety at Primary Schools

The examination of safety issues associated with aquatic activity at primary schools began by identifying, analysing and summarising relevant State and Territory water safety related legislation in order to "...identify and report on areas of inconsistency and/or deficiency..." as per Recommendation 17 of the NWSP 2004-07 ¹. Legislation examined included State and Territory Occupational Health and Safety and child protection documents.

State and Territory Department of Education safety policies and guidelines relevant to primary school aquatic activity were then identified, analysed and summarised. Excursion policies were also examined as these can include issues associated with leaving school grounds, which often occurs when accessing aquatic locations.

Relevant industry policies and guidelines that include information for enhancing the safety of primary school aquatic activity were then identified, analysed and summarised. These were the Guidelines for Safe Pool Operation (GSPO), AUSTSWIM guidelines and Royal Life Saving Society Australia (RLSSA) Guidelines for Water Safety in Commercial Learn to Swim and School Pools. The examination included identifying and evaluating best practice information for teachers and supervisors of aquatic activity to reduce risks to health and safety presented by primary school aquatic activity. While not part of this paper, resources relevant to primary school aquatic activity are identified and summarised in Appendix 6.

A legal case study (Taylor case) is then examined to explore the potentially dangerous consequences that can occur when aquatic activity is undertaken by schools. The Taylor case identified numerous lapses in safety which resulted in the death of a teacher's aide.

A literature review was undertaken to examine previously identified safety issues associated with primary school aquatic activity. Finally a discussion of the issues identified in the review is provided, including the need for effective communication of safety information and for that information to take a best practice, risk management approach to water safety.

Scope

The safety issues referred to in this paper can affect both primary school students participating in primary school activity as well as supervisors. Throughout this paper, the term 'supervisor(s)' refers to anyone who is not a student and is supervising aquatic activity undertaken during school hours or as part of school activities. This includes but may not be limited to: teachers, including physical education teachers and sports coordinators; parents and/or other volunteers; and qualified swim instructors. Safety issues are considered to be those that pose a risk of injury (both serious and minor) to students or supervisors. This risk includes, but is not limited to drowning.

The primary school years are the focus of this paper as this is the period during which swimming and water safety skills are most effectively taught and learnt and this is the age when the majority of Australian children learn to swim⁶.

Practical aquatic activity undertaken at primary schools is largely conducted outside of the classroom and is therefore also the focus of this paper. The authors acknowledge, however, that the curriculum also provides for classroom based theoretical lessons which include education on water and water safety issues which may have an impact upon the safety of, and where possible should be used in conjunction with, the practical aquatic activities conducted outside the classroom.

Identification, summary and analysis of legislation, policies and guidelines relevant to aquatic activities at primary schools for teachers, supervisors and students

The school environment has become increasingly regulated over the past few decades. Legislation and regulatory policies such as State and Territory Department of Education guidelines impact upon the decisions that schools make in relation to the activities they undertake and how these activities are conducted. It is therefore important to examine the legislation and regulations that apply to aquatic activity at primary schools in Australia. Such legislation and regulations have implications for a range of parties involved in aquatic activity at primary schools. This includes employers such as the Department of Education, principals and other persons in control of workplaces, and teachers, supervisors and students.

Legislation

The key legislation that governs the safety of employees and visitors at work also applies to teachers and students in the school environment, including when undertaking school activities that are not on the school campus. Each State and Territory has their own Occupational Health and Safety (OHS) legislation and this confers a number of duties on State and Territory Departments of Education, principals and staff when they undertake aquatic activities.

Aims

The aims of this review were to:

- Identify and summarise the occupational health and safety legislation in each State and Territory and consider how this applies to primary school aquatic activity
- Analyse the duties relevant to aquatic activity that are included within the identified legislation by State and Territory
- Report on areas of inconsistency and/or deficiency between the identified legislation by State and Territory
- Determine future direction in the area of legislation relevant to primary school aquatic activity as a means of improving the health and safety of teachers, supervisors and students.

The legislative obligations of pool operators will not be discussed in detail in this paper as these areas are discussed in a position paper previously produced entitled 'Public Swimming Pool Legislation in Australia: An examination of the legislation' and can be found at (www.watersafety.com.au).

Methods

OHS legislation for each State and Territory was identified and grouped into a table. The information in this table was summarised according to the following key safety duties:

- General duty of employers to ensure health and safety of employees at work
- Duty of employers to protect employees from workplace hazards
- Duty of employers to provide information, instruction, training and supervision
- Duty of employers to protect the health and safety of themselves and others at work
- Duty of employers with respect to third parties
- Duty of employers to provide first aid kits and equipment

Despite being recognised as best practice, the duty to conduct a risk assessment is not referenced in all OHS legislation. There is a general duty outlined in most OHS legislation to address risks to health and safety to the extent that is reasonably practicable, but no legal obligation to undertake a risk assessment. It should be noted that a risk assessment can assist an employer or person in control of a workplace to satisfy other legal obligations detailed under OHS legislation.

Table 1: Identification and summary of OHS Legislation

State	ACT (Occupational Health and Safety Act 1989)	NSW (Occupational Health and Safety Act 2000)	NT (Work Health Act 2007)	QLD (Workplace Health and Safety Act 1995)	SA (Occupational Health, Safety and Welfare Act 1986)	TAS (Workplace Health and Safety Act 1995)	VIC (Occupational Health and Safety Act 2004)	WA (Occupational Health and Safety Act 1984)
General duty of employers to ensure health and safety of employees at work	*An employer shall take all reasonably practicable steps to protect the health, safety and welfare of employer's employees [s37(1)] ⁷	*An employer must ensure the health, safety and welfare at work of all the employees of the employer [s8(1)] ⁸	*An employer shall, so far as is practicable, provide and maintain a working environment at a workplace that is safe and without risks to the health and safety of the workers working at the workplace [s29(1a)] ⁹	*A person who conducts a business or undertaking has an obligation to ensure the workplace health and safety of the person, each of the person's workers and any other person is not affected by the conduct of the relevant person's business or undertaking [s28(1)] ¹⁰	*An employer must, in respect to each employee employed or engaged by the employer, ensure so far as is reasonably practicable that the employee is, while at work, safe from injury and risks to health [s19(1)] ¹¹	*An employer must, in respect of each employee employed by the employer, ensure so far as is reasonably practicable that the employee is, whilst at work, safe from injury and risks to health [s9(1)] ¹²	*An employer must, so far as is reasonably practicable, provide and maintain for employees of the employer a working environment that is safe and without risks to health [s21(1)] ¹³	*An employer shall, so far as is practicable, provide and maintain a working environment in which the employees of the employer are not exposed to hazards [s19(1)] ¹⁴
Duty of employers to protect employees from workplace hazards	*An employer is to provide and maintain a working environment (including plant and systems of work) that is safe for employer's employees and without risks to their health and provide adequate facilities	*An employer is to ensure that systems of work and the working environment of the employees are safe and without risks to health [s8(1c)] ⁸	*An employer is to provide and maintain plant and systems of work that are, so far as is practicable, safe and without risks to health [s29(2a)] ⁹	*An employer must provide and maintain a safe and healthy work environment, provide and maintain safe plant, ensure the safe use, handling, storage and transport of substances and ensure safe systems	*An employer must provide and maintain so far as is reasonably practicable: a safe working environment, safe systems of work and plant and substances in a safe condition [s19(1a)]	*An employer must provide and maintain so far as is reasonably practicable, a safe working environment, safe systems of work and plant and substances in a safe condition [s9(1a)] ¹²	*An employer is to provide or maintain plant or systems of work that are, so far as is reasonably practicable, safe and without risks to health [s21(2a)] ¹³	*An employer shall provide and maintain workplaces, plant and systems of work, such that, so far as is practicable, the employees are not exposed to hazards [s19(1a)] ¹⁴

State	ACT (Occupational Health and Safety Act 1989)	NSW (Occupational Health and Safety Act 2000)	NT (Work Health Act 2007)	QLD (Workplace Health and Safety Act 1995)	SA (Occupational Health, Safety and Welfare Act 1986)	TAS (Workplace Health and Safety Act 1995)	VIC (Occupational Health and Safety Act 2004)	WA (Occupational Health and Safety Act 1984)
	for their welfare at work [s37(2)]			of work [s29(a-d)] ¹⁰	¹¹			
Employer's duty to provide information, instruction, training and supervision	*An employer has the duty to provide to the employees information, instruction, training and supervision necessary to enable them to perform work safely and without risks to health and safety [s37(2d)] ⁷	*An employer must provide such information, instruction, training and supervision as may be necessary to ensure the employee's health and safety at work [s8(1d)] ⁸	*An employer is to provide such information, instruction, training and supervision to a worker as is necessary to enable the worker to perform his or her work in a manner that is safe and without risks to health [s29(2d)] ⁹	*Employer must provide information, instruction, training and supervision to ensure health and safety [s29(e)] ¹⁰	*An employer must provide such information, instruction, training and supervision as are reasonably necessary to ensure that each employee is safe from injury and risks to health [s19(1c)] ¹¹	*An employer must provide any information, instruction, training and supervision reasonably necessary to ensure that each employee is safe from injury and risks to health [s9(1c)] ¹²	*An employer is to provide such information, instruction, training or supervision to employees of the employer as is necessary to enable those persons to perform their work in a way that is safe and without risks to health [s21(2e)] ¹³	*An employer shall provide such information, instruction and training to, and supervision of, the employees as is necessary to enable them to perform their work in such a manner that they are not exposed to hazards [s19(1b)] ¹⁴
Employee's duty to protect the health and safety of themselves and others at work	*An employee, whilst at work, is to take all reasonably practicable steps to ensure they do not create a risk, increase an existing risk, to the health and safety of themselves and persons at or near the workplace [s40(1a)] ⁷	*An employee, whilst at work, must take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's acts or omissions at work [s20(1)] ⁸	*A worker while at his or her workplace shall take appropriate care for his or her own health and safety and for the health and safety of all persons who may be affected by his or her acts at the workplace [s31(1)] ⁹	*An employee is not to wilfully place at risk the workplace health and safety of any person at the workplace and not to wilfully injure himself or herself [s36(d&e)] ¹⁰	*An employee must take reasonable care to protect the employee's own health and safety at work [s21(1)] ¹¹ . *An employer or self employed person must take reasonable care to protect his or her own health and safety at work	*Whilst at work an employee must take reasonable care for the employee's own health and safety and for the health and safety of other persons, including persons working under the direction or supervision of the employee, who may be affected by the employee's acts or	*While at work an employee must take reasonable care for his or her own health and safety and take reasonable care for the health and safety of persons who may be affected by the employee's acts or omissions at a workplace and co-operate with his or	*An employee shall take reasonable care to ensure his or her own safety and health at work and to avoid adversely affecting the safety or health of any other person through any act or omission at work [s20(1)] ¹⁴

State	ACT (Occupational Health and Safety Act 1989)	NSW (Occupational Health and Safety Act 2000)	NT (Work Health Act 2007)	QLD (Workplace Health and Safety Act 1995)	SA (Occupational Health, Safety and Welfare Act 1986)	TAS (Workplace Health and Safety Act 1995)	VIC (Occupational Health and Safety Act 2004)	WA (Occupational Health and Safety Act 1984)
					[s22(1)] ¹¹	omissions at the workplace [s16(a)] ¹²	her employer with respect to any action taken by the employer to comply with a requirement imposed by or under this Act or the regulations [s25(1)] ¹³	
Duties of employers with respect to third parties Note: Third parties in this context are taken to be volunteer supervisors and other persons not directly employed by the Department (including students)	*An employer shall take all reasonably practicable steps to ensure persons at or near the workplace who are not the employer's employees are not exposed to risks to their health and safety [s38(1)] ⁷	*An employer must ensure that people (other than employees of the employer) are not exposed to risks to their health and safety arising from the conduct of the employer's undertaking whilst they are at the employer's place of work [s8(2)] ⁸	*An employer shall ensure that the health and safety of any other person is not adversely affected as a result of the work in which the employer or any worker is engaged [s29(1b)] ⁹	*The relevant person has an obligation to ensure workplace health and safety of any other person, who is not employed by the employer, is not affected by the conduct of the relevant person's business or undertaking [s28(1)] ¹⁰	*An employee must take reasonable care to avoid adversely affecting the health or safety of any other person through an act or omission at work [s21(1a)] ¹¹	*An employer must ensure so far as is reasonably practicable that the health and safety of any person, other than the employee of the employer or a contractor, or any person employed or engaged by a contractor, is not adversely affected as a result of the work carried on at a workplace [s9(3)] ¹²	*An employer must ensure, so far as is reasonably practicable, that persons other than employees of the employer are not exposed to risks to their health or safety arising from the conduct of the undertaking of the employer [s23(1)] ¹³	*An employer or self-employed person shall, so far as is practicable, ensure that the safety or health of a person, not being an employee of the employer, is not adversely affected wholly or in part as a result of work that has been or is being undertaken or any hazard that arises or is increased by work or systems of work operated by the employer or self-employed person [s21(2)] ¹⁴

State	ACT (Occupational Health and Safety Act 1989)	NSW (Occupational Health and Safety Act 2000)	NT (Work Health Act 2007)	QLD (Workplace Health and Safety Act 1995)	SA (Occupational Health, Safety and Welfare Act 1986)	TAS (Workplace Health and Safety Act 1995)	VIC (Occupational Health and Safety Act 2004)	WA (Occupational Health and Safety Act 1984)
Duty of employer to provide first aid kits and equipment Note: OHS Regulations also consulted for this duty	<p>*An employer must take all reasonably practicable steps to provide appropriate medical and first aid services for employees [s37(2i)]⁷</p> <p>*No reference made in the OHS Regulations</p>	<p>*An employer must provide at each place of work first aid facilities (which includes a first aid kit) that are adequate for the immediate treatment of illnesses and injuries that may arise at the place of work and if more than 25 people are employed at a place of work – trained first aid personnel [s20(2)]¹⁵</p>	<p>*An employer shall provide and maintain at a workplace, first aid equipment and first aid amenities for use by a worker at the workplace [s52(1)]¹⁶</p>	<p>*An employer must ensure that first aid equipment is reasonably accessible to each of the employer’s workers and appropriate and adequate for the worker and the worker’s work [s223(1-2)]¹⁷</p>	<p>*An employer must provide occupational health and first aid facilities for the welfare of his or her employees [s2.11.1(1)]¹⁸</p>	<p>*No reference is made to first aid in OHS Act or Regulation</p>	<p>* No reference made to first aid in relevant OHS Regulations</p>	<p>*A person who, at the workplace, is an employer, the main contractor or a self employed person, must provide such first aid facilities as are appropriate having regard to the type of hazards to persons at the workplace and the risks of those hazards and the number of persons at the workplace [s3.12(2a)]¹⁹</p>

Analysis

There are a number of duties under OHS legislation for principals, teachers and supervisors associated with the provision of aquatic activity and water safety education. These include duties in the areas of workplace health and safety, workplace hazards, information, instruction, training and supervision and first aid (Table 1).

General duty of employers to ensure the health and safety of employees

The Department of Education in the respective State or Territory has a general duty to ensure the health and safety of their employees (that is teachers, principals and other school staff) whilst at work. This responsibility also applies to principals as they are in control of workplaces. With respect to aquatic activity this involves ensuring work practices and venues are safe and do not pose risks to the health and safety of staff. This duty is best addressed through a risk assessment prior to performing the activity for the first time and reviewing it on a regular basis.

The legislation with respect to this duty is consistent between all States and Territories. All make reference to employees, however the NT legislation makes reference to workers working at the workplace⁹, QLD refers to an employer's duty to themselves, their employees and others at the place of work¹⁰ and SA employers have a duty to persons employed or engaged by the employer¹¹.

Duty of employers to protect employees from workplace hazards

Under OHS legislation employers have a duty to protect employees from workplace hazards. With respect to aquatic activity, this means the Department of Education in the relevant State or Territory, as the employer, has a duty to ensure that its employees (teachers and school staff) are not exposed to hazards that may pose risks to their health and safety whilst performing duties associated with their employment.

The references to this duty under OHS legislation are predominately consistent across the States and Territories. All States and Territories refer to an employer's duty to ensure safe plant and systems of work, QLD and TAS OHS legislation also refer to an employer's duty to maintain safe use, handling and transport of substances^{10 12}.

Duty of employers to provide information, instruction, training and supervision to employees

An employer, under OHS legislation also has a duty to provide information, instruction, training and supervision to employees. With respect to schools undertaking aquatic activity, this would include a duty to provide information, instruction and training on safety policies and procedures in aquatic environments. Generally, this duty would require the Department of Education to inform principals of such policies and procedures. Principals are to then take steps to ensure that their employees (school staff) are informed of the existence and content of these policies and procedures and ensure that they are understood and implemented. Analysis of the legislation found that these duties were consistent across the States and Territories.

Duty of employees to protect their own health and safety and the safety of others whilst at work

OHS legislation also confers duties on employees to protect their own health and safety and the safety of others (such as students) whilst at work. References made to this duty in the identified

legislation are also predominately consistent as all States and Territories have provisions which refer to an employee's duty to cooperate with the direction of their employer.

Duty of employers with respect to third parties

Employers also have duties to third parties under OHS legislation which is especially relevant to aquatic activity at primary schools. Third parties in this context, refers to non-employees, such as volunteers, people utilised as supervisors that are not employed and students. These duties are generally consistent across jurisdictions, and require employers or persons in control of workplaces to ensure that non-employees are not exposed to risks to health and safety arising from the employers undertaking. In the case of schools undertaking aquatic activity this would be regarded as part of the employer's undertaking. This duty would also apply to employers (or persons in control of the workplace) at aquatic centres.

Duty of employers to provide first aid kits and equipment

There are a number of responsibilities employers and persons in control of workplaces, such as principals, may have in relation to the provision of first aid kits and equipment under Occupational Health and Safety Acts and Regulations in their State or Territory. This may include ensuring a first aid kit is available at all venues used for aquatic activity.

Reference to this duty in the legislation varies between jurisdictions. Two of eight States and Territories (TAS and VIC) make no reference to the duty of an employer to provide first aid equipment^{20 21}. The NSW OHS Regulations state that first aid facilities including a kit are to be provided as well as first aid personnel if over 25 people are employed¹⁵. The QLD OHS Regulations state that an employer is to ensure first aid equipment is reasonably accessible to employees¹⁷ and WA Regulations confer duties on employers, main contractors and self employed persons to provide first aid facilities¹⁹.

ACT OHS Act states that an employer is to take all reasonably practicable steps to provide appropriate medical and first aid services for employees⁷. The NT OHS Regulation states that an employer shall provide and maintain, at a workplace, first aid equipment and amenities for use by a worker at the workplace¹⁶. The SA OHS Regulations state than an employer must provide occupational health and first aid facilities for the welfare of his or her employees¹⁸.

Risk assessments

Risk is defined as the "...likelihood of an injury, illness or disease occurring due to exposure to a hazard..." (pg 3)²¹. A risk assessment involves establishing the context, identifying the risks, analysing and evaluating the risks and eliminating where possible or otherwise controlling the risks to improve health and safety²². To be most effective, this process should be subject to ongoing monitoring and review and be established in consultation with, and adequately communicated to, staff²².

Risk assessments are one of the best ways for employers and persons in control of workplaces to ensure the health and safety of staff and students when undertaking aquatic activities. Performing a risk assessment therefore assists in helping employers and people in control of a workplace to fulfil their legal obligations.

Risk assessments are recognised as best practice. A thorough risk assessment provides a systematic approach that ensures all hazards and risk are considered. This would include areas such as supervision ratios, water safety experience of both staff and students, qualifications of staff, medical histories, and skill level of students.

Additional legislative duties – Child Protection Issues

This report did not examine child protection issues in detail. Work in this area has been previously conducted by the National Child Protection Clearinghouse (NCPC) in their report entitled 'Understanding Organisational Risk Factors for Child Maltreatment: A Review of Literature'²³ and by the Australian Institute of Health and Welfare (AIHW) in the report 'Child Protection Australia 2003-04'²⁴, both of which provide information on differences between the States and Territories in the application of child protection legislation.

Research conducted by these organisations found that:

- All States and Territories have legislation requiring reporting of harm due to child abuse and neglect. They do however note that there are differences in who is compulsorily required to report, what is required to be reported and the terms used to describe what is to be reported²⁴. For example in:
 - ACT, under mandatory reporting introduced in 1997, teachers are mandated to report physical and sexual abuse, although other forms of child maltreatment are also discussed in training sessions.
 - NSW under the *Children (Care and Protection) Act 1987* people in professional work or other paid employment in the field of education are to report if they suspect on reasonable grounds (that arise as a consequence of their employment) that a child is at risk of harm.
 - NT, it is mandatory that any person who believes a child is being, or has been abused or neglected, is required to notify a Family and Children's Services officer or police station.
 - QLD, Education Queensland policy requires school principals to report suspected child abuse and neglect to the appropriate authorities and requires teachers to report through principals, however this is not legislated.
 - SA under the *Children's Protection Act 1993*, teachers and employees of, or volunteers in government departments, agencies or local government or non-government agencies that provide education services wholly or partly for children are required to notify the Department of Human Services (Family and Youth Services) when they suspect on reasonable grounds that a child is being abused or neglected.
 - TAS under the *Children, Young Persons and Their Families Act 1997*, teachers and school principals and people employed, or who are volunteers in, government agencies or organisations funded by the Crown that provide education wholly or

partly for children, have a responsibility for making sure children are safe and protected.

- VIC under the *Children and Young Persons Act 1989* primary and secondary school teachers and principals are to report suspected cases of child physical and sexual abuse.
- WA there are no specific legislative provisions for the reporting of harm by teachers and education sector employees²⁴.
- All States and Territories use a structured screening procedure for child-related employment, such as teachers and childcare workers²³. There is some variation in the screening procedures, however a screening commonly comprises a National criminal records check of convictions for crimes against children and relevant crimes against adults²⁵.
- All States and Territories have legislation or proposed legislation that requires people in child related employment to be screened for criminal offences²³. A national comparison of working with children legislation is found in Appendix A of the NCPC report 'Understanding Organisational Risk Factors for Child Maltreatment: A Review of Literature'²³.
- It should be noted that non-government and private organisations may have their own policies that require their employees and/or volunteers to undergo criminal records screening²⁵.

State and Territory Department of Education Policies

An identification, summary and analysis of State and Territory based Department of Education policies relevant to aquatic activity has been undertaken.

Aims

The aims of this review were to:

- Identify and summarise the State or Territory Departments of Education policies relevant to aquatic activity at primary schools across Australia
- Analyse the content of these policies and their implications for safety
- Report on areas of inconsistency and/or deficiency between the identified policies by State or Territory
- Identify where improvements could be made to protect the safety of teachers, supervisors and students undertaking aquatic activities at primary schools.

Methods

Each State and Territory's Department of Education website was searched to identify policies relevant to water safety and aquatic activity. Excursion policies were also included as many schools do not have access to aquatic facilities or locations on school grounds and therefore must conduct an excursion, which includes adhering to the responsibilities and duties identified in excursion policy.

An excursion is defined as a "...school-related activity by students, under the supervision of a teacher/s, directly related to the curriculum of the school. An excursion is a variation to normal activity and is not predominately recreational..."²⁶.

These policies were then searched for information relating to 6 key areas:

1. General information of relevance to this paper
2. Supervision (including ratios of students to teachers/supervisors)
3. Qualifications (i.e. recognised training or certificates, or skills teachers and supervisors must possess)
4. Location (i.e. required information about the location, such as maximum water depth and suitability of venue)
5. Programs (i.e. activities being undertaken and lessons taught)
6. Safety (which includes information on risk assessments, safety and medical checks and duty of care)

These areas were identified as key topics, due to the fact that the majority of Departmental policies and guidelines organised information under these headings. The information identified in these policies and guidelines has been summarised in Table 2. The table includes a column with the source of the document and a reference for readers to gain further information on that particular policy if required.

Table 2: Identification and summary of Department of Education policies and guidelines

The information below has been collected from the policies and guidelines deemed to be relevant to aquatic activity found on each State and Territory Department of Education website.

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
ACT	Swimming (education, recreation and swimming carnivals)	<ul style="list-style-type: none"> *All activities and personnel are to be approved by the Principal. *A suitable first aid kit should be available at the venue. 	<ul style="list-style-type: none"> *Minimum of 2 adults per class are required, 1 of which is to be a teacher. *For supervision of Years 1 to 6, a teacher must be accompanied by one adult supervisor for a regular sized class *All students to be supervised at all times. 	<ul style="list-style-type: none"> *One of the adults present (including pool supervisor staff) must have the ability to: <ol style="list-style-type: none"> a) effect a recovery of a student from the water at the venue b) perform first aid (hold a current senior first aid certificate); and c) perform cardio-pulmonary resuscitation (hold a current CPR award). 	<ul style="list-style-type: none"> *Location for learn to swim must: <ul style="list-style-type: none"> *water depth (no more than arm-pit height) * sufficient space for learners to stand * easy access in & out of the water * student should be able to stand comfortably and depth must not increase rapidly 	<ul style="list-style-type: none"> *Activities should be modified to match skill and fitness levels of students. *Programs to include progressive and sequential skill development *Suitable warm up and stretching activities to occur prior to lesson 	<ul style="list-style-type: none"> *At least one adult ready to enter the water to assist a student *Safety checks to be built into lesson procedure (buddy system or roll checks) *Life saving aids to be readily available & teachers must know the location of aids and be confident with their use 	ACT Department of Education and Training ²⁷
ACT	Excursions	<ul style="list-style-type: none"> * Copies of emergency contacts & procedures & contingency plans are kept in the school and by the teacher in charge of the excursion *Duty of care to be exercised by accompanying adults throughout an excursion 	<ul style="list-style-type: none"> *For a Category A & B excursion, a ratio of one teacher per class group is required. Category C excursions require 2 adults per class group including 1 teacher. * Supervision is to be adequate in relation to the number & needs of students, their maturity, anticipated behaviour & planned activities 	<ul style="list-style-type: none"> *Accreditation of industry standard to be sighted for a private provider *It is the responsibility of the teacher in charge to give consideration for occasions when it is desirable for a staff member to have a current first aid certificate & appropriately stocked first aid kit. 	<ul style="list-style-type: none"> *An assessment of a private provider must be undertaken to ensure staff are trained to industry standard & a risk management approach, relevant to the activity undertaken is sighted *Provider is also required to have appropriate insurance, including at least \$20 million Public Liability Cover for any one event. 	<ul style="list-style-type: none"> *Excursions to be directly related to the curriculum and not predominately recreational. *Alternative activities and strategies to be made available to students unable to participate in an excursion. *Reasonable adjustments should be made to allow disabled students to participate in excursions. 	<ul style="list-style-type: none"> *Risk assessment to be undertaken for a category C or D excursion (see source for explanation) *For all other excursions a risk assessment is recommended 	ACT Department of Education and Training ²⁶

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
NSW	Swimming and Water Safety	<p>*Students are to be instructed to wear adequate sun protection (eg SPF 15+ as a minimum)</p> <p>*A supervision plan should include provisions for students when not swimming</p>	<p>*A minimum of two adult supervisors, one of whom must be a teacher, with appropriate expertise and qualifications are to be present at all times</p> <p>*For learn to swim, beginners should be supervised in a ratio of 1(supervisor):10 (students) and for intermediate level, those able to achieve basic survival skills, (1:12). Supervision on pool deck and for students who leave their instructional group must also be provided.</p> <p>*For recreational swimming sufficient staff to control the activity should be provided.</p> <p>*All students in the water must be continually supervised</p>	<p>*Principals are to arrange swimming classes only for the number of students for which suitably qualified staff are available</p> <p>*School initiated learn to swim must possess the AUSTSWIM Teacher of Swimming and Water Safety Qualification</p> <p>*At least one supervising teacher must possess a current CPR qualification & current emergency care training</p> <p>*For recreational swimming at least one supervisor must hold AUSTSWIM certification, RLSSA Bronze Medallion or SLSA Patrol Bronze Medallion among others</p>	<p>*Schools should take into account any dangers associated with any congestion at the venue</p> <p>*Students are to be counted and paired at the facility, prior to entering the water</p> <p>*Venues should only be used where facilities have been assessed as suitable for the purpose of the activity proposed to be undertaken.</p> <p>*Teacher in charge to ensure appropriate rescue equipment is readily available at the venue, and in good condition.</p> <p>*A well equipped medical kit including a resuscitation mask with a one way valve must also be available.</p> <p>*Skill level should also be appropriate for the venue used</p>	<p>* Activities to be appropriate to student skill level and abilities</p> <p>*The fitness levels of students with disabilities who are participating will also need to be addressed.</p> <p>*For all aquatic programs and activities, parents must be informed of full details of the location, the supervision to be provided & planned activities</p> <p>*Underwater swimming to be restricted to those required in structured programs and closely supervised</p>	<p>*Information on student's medical conditions to be sought from parents</p> <p>*Swimming ability also to be indicated by parents when granting consent</p> <p>*Poor or non-swimmers are to be assessed prior to participating in swimming or water activities</p> <p>*A buddy system to be used for weak or non swimmers</p>	<p>NSW Department of Education and Training²⁸</p> <p>Note: There are also specific NSW DET policies for water polo, scuba diving, rowing, diving and canoeing among others.</p>
NSW	Excursions	<p>*A duty of care is owed to students in the school environment & while on excursion</p> <p>*Parental consent and medical information for students are to be</p>	<p>*The number of teachers to accompany students for each excursion to be guided by Departmental statements on class sizes.</p>	<p>*Any excursions involving swimming or water activities must include a member of staff with a current CPR qualification and emergency care training</p>	<p>*Teachers supervising excursions must consider emergency response planning, including medical planning and relevant forecasts and other safety warnings</p>	<p>*The rationale for any excursion should reference school curriculum objectives and be relevant to their achievement.</p> <p>*Poor or non swimmers should be</p>	<p>*A risk assessment is to be conducted and a risk management plan is to be developed prior to seeking approval for any excursion</p> <p>*Procedures are to be</p>	<p>NSW Department of Education and Training²⁹</p>

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
		obtained, as well as swimming ability.	*There must be sufficient numbers of appropriate, responsible adults, including support teachers and teacher's aides to ensure and assist with adequate supervision			assessed as to whether they should participate in the program. *School staff should take all reasonable steps to ensure a particular activity is safe.	regularly reviewed and updated *A first aid kit is to be taken on all excursions	
NT	Swimming and water safety	*DEET teachers have overall responsibility for the safety and wellbeing of the students in their care. *AUSTSWIM qualified teachers are responsible to the teacher in charge	*Supervision ratios based on swim and survive skill levels. Eg Level 1 requires a ratio of 1:10 in a shallow pool and 1:6 in a deep pool and 1:6 plus an independent observer in natural waterways	*The programs should be conducted by a suitably qualified instructor or teacher (that is a person who holds a current AUSTSWIM teacher of swimming and water safety award and a current resuscitation award) *At least one person at the aquatic environment is to have a Bronze Medallion, especially when swimming is conducted at a natural waterway	*Box jellyfish and other hazardous marine life are prevalent in NT waters and students should check the water before entering.	*Programs are linked to RLSSA Swim and Survive skill levels. *Programs are also to be linked to NT Curriculum Framework indicators from Health and Physical Education learning area	*A first aid kit is to be available and an adult with a current first aid certificate is to be present during swimming and water safety activities *An emergency procedure is to be established and all participants should be aware of the procedure & practiced prior to the start of the program	NT Department of Employment, Education & Training ³⁰
NT	Excursions	*Excursions are to be planned and in accordance with departmental policies	*A teacher must always be present and in charge of an excursion, other responsible adults may be included in ratios *Pre and primary school day visits the maximum ratio is 1 teacher to 30 students	*No reference is made to specific qualifications but different categories of excursion require different teachers to be present (eg a principal or head teacher or classroom teacher)	*Full details on the location and details on any activity that may pose a greater risk of student injury should be given to parents	*An educational excursion must have clear educational outcomes which take into account learning program and resources of the school and the needs of students. *Parents are to be	*A teacher's duty of care cannot be delegated by a teacher to another person, such as a volunteer *Reasonable care should be taken to ensure the safety of students and staff	NT Department of Employment, Education and Training ³¹

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
			*For overnight and overseas excursions a ratio of 1:15 is recommended as well as representing both genders			informed of programs and planned activities, as well as the details of any activities which may present greater risk of student injury.	*Teachers have a responsibility to protect students from risks of injury that the teacher could reasonably foresee	
QLD	Learn to swim	*Participation in swimming is deemed to be medium risk (Level 2) *Safety checks such as roll call or buddy checks should be incorporated into lesson procedures	*The minimum supervision level is for two adults to be present at all times	*The leader of the learn to swim program should be a registered teacher with past experience in teaching swimming and previous involvement in the implementation of safety procedures. *If no registered teacher is available, an adult may be utilised who has a Level 1 Swimming Certificate of the National Coaching Accreditation Scheme, an AUSTSWIM certificate or an equivalent qualification as determined by the Department of Education. *At least one adult present should be able to effect a recovery of a student from the water at the teaching venue, perform first aid and perform CPR	*A first aid kit should be available at all venues where lessons are conducted	*When learners progress beyond standing depth, a first attempt must be made one at a time with an adult ready to assist. *Lengthy and fatiguing training sessions should be avoided.	*Hazards are to be identified, their significance assessed and potential risks are to be managed	QLD Department of Education, Training and the Arts ³² Note: There are also a number of other policies on recreational swimming, swim training, the operation of school swimming pools, snorkelling and scuba diving among others.

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
QLD	Excursions	*Duty of care is to be extended to all students whilst on excursion	*A ratio of at least one adult to 5 preschool/prep students and at least 1 adult to 10 students (for Years 1,2 and 3) is to be maintained *Age, capability and activity among others are factors to be considered when determining supervision ratios for other year levels.	*Parents and guardians with skills in intended activities or locations may be utilised for added supervision *If utilised, parents must be instructed of potential hazards and their roles and responsibilities prior to the excursion	*The suitability of the venue for a school excursion is to be determined prior to the excursion being conducted	*Principals have the responsibility to ensure the curriculum relevance of excursions. *School resources, needs of students, cost of excursions and total learning program are to be considered when determining education value of excursions	*Significant medical conditions of students are to be recorded *A risk assessment and an emergency contingency plan are to be established prior to the excursion	QLD Department of Education, Training and the Arts ³³
SA	Swimming	*Ensure appropriate safety equipment is in place to assist with or effect a rescue. *Attention should be paid to hazards in open water environments.	*A minimum of two leaders are required for both pools and other open water venues. *For participants in years 3 to 7, the ratios are 1:12 in a pool and 1:10 in open water.	*Current CPR qualifications are essential within the leadership group as well as first aid qualifications. *For a pool, if no lifeguard is on site, one member of the leadership team must hold a current Bronze Medallion. *For a beach, one member of the leadership team must hold a current Certificate 2 Public Safety and Aquatic rescue qualification.	*Location will determine the qualifications and experience required among instructors and supervisors. *Activities are to be conducted only at recognised safe swimming areas or at sites carefully evaluated for hazards and emergency action procedures.	*Weather and other conditions will impact upon the type of activities and aquatic program that can be run.	*In areas of poor visibility, check water depth and absolutely no diving is to occur. *PFDs are to be worn by all participants in the River Murray and other waters where visibility is poor.	SA Department of Education and Children's Services ³⁴
SA	Camps and Excursions	*Principals are to ensure children can access first aid support at all times. *Relevant safety	*Discretion is to be used when determining staff to student ratios as they may need to be higher	*Instructor and teacher qualifications will vary dependant upon the activity being undertaken,	*Any location chosen for an excursion or camp must satisfy OHS and equity requirements.	*All off site activities must be designed to include disabled students.	*Student safety must be the paramount consideration. *Health and first aid information to be	SA Department of Education and Children's Services ³⁴

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
		equipment must be available at all times. *Every teacher has a duty of care to every student under his or her supervision.	than those recommended due to age, skill level and nature of activity and location among others.	*For high risk activities minimum qualifications are mandatory,	*An assessment must be undertaken to identify and evaluate hazards and develop and implement risk control strategies.		collected on students. *A first aid kit of appropriate size and content must be available for all camps and excursions.	
TAS	Swimming Activities (Pool or Open Water)	*Departmental policies are relevant to volunteers	*The supervision ratio for infants and levels 3 to 6 is one teacher to 16 students	*Registered teachers who have the authority to make decisions are to be appointed for swimming activities *Teachers are to have CPR qualifications and an RLSSA Swimming and Water Safety Professionals Learning Qualification	*For swimming instruction for Infants and Levels 3-6 a pool with a water depth no deeper than the chest of the teacher is to be used	*Under this policy, different programs require different venues, qualifications and supervision ratios.	*Safety qualifications are to be renewed annually by teachers and instructors	TAS Department of Education ³⁵
TAS	Minor Excursions	*Principal must give approval for all excursions	*Students should be in view of supervising adults at all times and adults are to be briefed on their roles and responsibilities *Student to teacher ratios will vary but for most environments, away from the school there should be 1 teacher for every 15 students as a minimum.	*Teacher in charge must have experience in group management skills out of doors, knowledge of and ability to perform first aid, and relevant water activity qualification	*Teacher in charge is to have first hand knowledge of the area and the hazards the area may pose	*Parents of students should be informed of the activities due to be undertaken on an excursion. *Teachers and leaders should ensure that students have correct equipment for the activities being undertaken.	*Medical information and parental consent must be obtained	TAS Department of Education ³⁶
VIC	Swimming							Swimming Guidelines currently being developed and not accessible

State	Activity (e.g. swimming or excursion)	General	Supervision	Qualifications	Location	Programs	Safety	Source (for further information see)
VIC	Excursions	<ul style="list-style-type: none"> *Full records of accident and injuries are to be maintained *A student's swimming ability is to be ascertained *Teachers have a duty of care to protect students from any reasonably foreseeable injury. 	<ul style="list-style-type: none"> *Supervision ratios are to be adequate with respect to staff experience and qualifications, age maturity and sex of students and the nature and location of the excursion among other factors 	<ul style="list-style-type: none"> *Staff are to have levels of first aid training applicable to the activities being undertaken 	<ul style="list-style-type: none"> *Excursion venue should be selected on the basis of risk management principles 	<ul style="list-style-type: none"> *Nature of programs will depend upon school's curriculum *Parents and guardians to be given sufficient information on activities to be conducted and the risks associated with those activities 	<ul style="list-style-type: none"> *All students and staff are to wear appropriate apparel and protective gear *An emergency management plan is to be in place *Appropriate risk management must be undertaken to reduce the risk of injury 	Victoria Department of Education and Early Childhood Development ³⁷
WA	Water based activities	<ul style="list-style-type: none"> *Teacher in charge must determine risk with respect to the location, activity and students skill level 	<ul style="list-style-type: none"> *At no time are there to be less than 2 supervisors and one of these supervisors must be qualified 	<ul style="list-style-type: none"> *Supervisors must be able to swim the length of the area they are supervising as a minimum, have experience or demonstrated capacity for supervising the venue or similar venues and effect a rescue or render emergency care among others 	<ul style="list-style-type: none"> *Venue signage must be adhered to (ie diving signage) *Swimming and water safety programs may be conducted in a variety of contexts, including on or off school site, at potentially high risk locations such as surf beaches and potentially low risk locations such as swimming pools 	<ul style="list-style-type: none"> *Level of risk will vary according to the nature of the activity. *Activities may include fitness and stroke correction and/or preparation for competitive activities such as triathlon and water polo 	<ul style="list-style-type: none"> *Student's capacity must be assessed *A high level of risk analysis and management should be conducted when engaging in aquatic activity 	WA Department of Education and Training ³⁸ Note: There are other guidelines for specific activities such as snorkelling, swimming carnivals and surf activities for example.
WA	Excursions	<ul style="list-style-type: none"> *Records of excursions must be retained 	<ul style="list-style-type: none"> *Supervision strategies must be employed *Supervision requirements must be determined with respect to age, experience and ability of students among other factors 	<ul style="list-style-type: none"> *Staff must be able to establish a safe environment, effect a rescue and render emergency care, respond to their environment and monitor the wellbeing of students 	<ul style="list-style-type: none"> *An excursion management plan must include information on the risks the chosen location may pose *The environment must also be assessed with respect to adequate facilities for the age, number and gender of students 	<ul style="list-style-type: none"> *Risks relevant to the student's capacity in relation to activities should be included in a risk assessment. 	<ul style="list-style-type: none"> *Students capacity as well as the skills and qualifications of staff must be assessed 	WA Department of Education and Training ³⁹

Analysis of Department of Education policies and guidelines

There are a number of policies and guidelines relevant to teachers and supervisors of aquatic activity that are produced by the Departments of Education in each State and Territory.

From the identification and summary of the Department of Education policies and guidelines (Table 2), an analysis of the content of the documents, including any inconsistencies and deficiencies was undertaken. It should be noted that at the time of preparing this paper there were no VIC swimming guidelines available. It should also be noted that the general category of information will not be analysed as this section merely collected other information of note from the policies and as such is not comparable between States and Territories.

Supervision

Five of the eight States and Territories examined (ACT²⁷, NSW²⁸, QLD³², SA³⁴ and WA³⁸) require supervision ratios of a minimum of 2 adult supervisors at all times when children are in the water. One further Territory, NT, requires 2 supervisors in natural waterways³⁰. Of those two supervisors, at least one of these supervisors is to be a teacher, which means volunteers and non Departmental employees may be engaged to assist in the supervision of students.

Supervision ratios for swimming activities vary between the States and Territories, ranging from 1 (teacher) to 5 (students) in Queensland³² for preschool and prep students to 1:16 in Tasmania³⁵ for levels 3-6.

In NSW for beginners there is to be a ratio of 1:10 and a ratio of 1:12 for students with intermediate skills, that is those able to achieve basic survival skills²⁸. NT ratios are based upon Swim and Survive levels, with students with Level 1 skills to be supervised in a ratio of 1:10 in a shallow pool and 1:6 in a deep pool³⁰. For QLD preparatory students undertaking aquatic activity a ratio of 1:5 is required and for students in Years 1, 2 and 3, a supervision ratio of 1:10³². TAS students in infants and Years 3 to 6 are to be supervised in a ratio of 1:16³⁵.

There are differences in the language used, as some policies use general language that does not provide adequate explanation. ACT guidelines states that supervision is to include one teacher and one adult for a regular sized class²⁷, however fails to define what a regular sized class is which poses problems for adhering to the policy as well as providing safe levels of supervision.

Similarly, the excursion policies for the ACT²⁶, NSW²⁹ and VIC³⁷ state that adequate supervision is to be provided, yet what is considered to be adequate supervision is not explained. The use of general terminology when no supervision ratios are provided makes adhering to the policies difficult. Supervision ratios varied based on factors such as student numbers and their aquatic ability and location.

Qualifications

The swimming policies for ACT²⁷, NSW²⁸, NT³⁰, QLD³², SA³⁴ and TAS³⁵ and the excursion policies for NSW²⁹ all make reference for the need for at least one teacher or supervisor to be able to perform CPR and to hold a current resuscitation certificate. The WA swimming and excursion policies state that supervisors are to be able to effect a rescue or render emergency care^{38 39}.

First aid and emergency care qualifications are required in ACT²⁷, NSW²⁸, NT³⁰ and WA³⁸ policies.

NSW²⁸, NT³⁰ and QLD³² policies require a learn to swim teacher to possess a current AUSTSWIM teacher of swimming and water safety award. NSW guidelines also state, for recreational swimming, at least one supervisor is to hold either a RLSSA Bronze Medallion, a SLSA Bronze Medallion or a SLSA Surf Rescue Certificate²⁸. The NT policy also specifies that at least one person at the aquatic environment is to hold a Bronze Medallion, especially when activities are conducted in a natural waterway³⁰. SA states that if no lifeguard is in attendance at the pool, one member of the leadership team must hold a current Bronze Medallion³⁴.

The ACT policy for swimming states that one of the adults present (including the pool supervisor) must be able to effect a recovery of a student from the water, and hold current senior first aid and CPR certificates or awards. There is no mention of any qualifications required to demonstrate competency in recovery from water or instruction²⁷.

The VIC excursion policy states that staff are to have levels of first aid training applicable to the activities being conducted³⁷.

Location

Maximum water depth for learners was only specified in ACT²⁷ and TAS³⁵ policies and water depth for learners is also not to increase rapidly²⁷. In NSW potential congestion at venues is to be considered and venues are only to be used when assessed as suitable²⁸. NT policy states that natural waterways are to be checked for dangerous marine life³⁰ and WA policies note that signage at the venue is to be adhered to when undertaking aquatic activities³⁸. In the SA swimming policy, aquatic activity is to be conducted at recognised safe swimming areas or at sites carefully evaluated for hazards and emergency action procedures³⁴.

Programs

ACT and NSW swimming and water safety policies make reference to the need for programs and activities to be modified to match the skill and fitness levels of students^{27 28}. QLD swimming policy states that lengthy and fatiguing training sessions are to be avoided³². VIC and WA excursion policy states that students' abilities must be assessed prior to undertaking an aquatic activity^{37 39}. NSW also makes reference to the fitness levels of disabled students and the fact that these will need to be considered when establishing aquatic programs²⁸.

The QLD and TAS policies recognise that the aquatic activity or programs to be conducted by the school should be considered in relation to venue choice, availability of appropriately qualified teachers and required supervision ratios^{32 35}. The ACT policy is the only document to outline activities that are to be undertaken prior to aquatic activity, stating that warm up and stretching are to be conducted prior to the lesson. Programs should also be devised to include sequential and progressive skill development²⁷. The SA swimming policy states that weather and other conditions will impact upon the types of activities that may be run³⁴.

Safety

The swimming and water safety policies for QLD and WA state that hazards are to be identified and risks are to be managed^{32 38}. The need for the swimming ability of students to be assessed prior to undertaking aquatic activity is also noted in NSW²⁸ and WA³⁸. NSW policies also make reference to ascertaining student medical abilities²⁸. Safety checks and buddy systems are to be utilised to boost safety in both the ACT²⁷ and NSW²⁸.

The SA swimming policy states that water depth must be checked and no diving must be conducted in areas with poor water visibility³⁴. The document also states that personal flotation devices (PFDs) are to be worn when participants are swimming in the Murray River or in areas with poor water visibility³⁴.

In TAS teachers and volunteers instructing and supervising aquatic activity are to ensure that their qualifications are renewed annually³⁵ and NT policies outline that an emergency management procedure is to be established and practiced by supervisors and participants prior to undertaking aquatic activity³⁰.

With respect to deficiencies in the identified policies when addressing safety issues, all policies should include information on risk assessments and promote a risk management approach to school based water safety education and aquatic activity.

Excursions (Risk assessments)

A risk assessment should be conducted prior to undertaking any school based aquatic activity including excursions to aquatic locations. The excursion policies for the ACT²⁶, NSW²⁹, NT³¹, QLD³³ and VIC³⁷ all specify the need for a risk assessment to be undertaken prior to conducting an excursion, however ACT states that a risk assessment is only mandatory for category C (excursions which involve day travel beyond the ACT) and category D (excursions which include overnight accommodation regardless of the distance from the school) excursions and are merely recommended for all other types of excursions²⁶.

ACT²⁶, NT³¹ and SA³⁴ policies outline the duty of care responsibilities of teachers with respect to students. In NSW a risk assessment plan is to be developed prior to seeking approval for an excursion (NSW)²⁹ and WA³⁹ specifies that an assessment of student's skills and the qualifications of staff must be conducted.

Additional issues

There were three additional issues identified as part of the examination of school policies, these are evidence base, child protections and venues.

Existing Program(s)

The NT swimming policy utilises an existing, well established national program (RLSSA Swim and Survive) and identifies safe environments to be utilised (shallow pool, deep pool, natural waterway for example), minimum instructor qualification (AUSTSWIM qualifications and Bronze Medallion qualifications for example) and supervision ratios³⁰. Using an existing program provides a sound model to base the policy on as: information about the program is readily available, including the strengths and limitations; the scope of the program is known; and there are existing instructors and systems in place for the delivery of the program that can be strengthened through the policy.

Child protection

All people in child-related employment must submit to a working with children check to ensure they have not been convicted of a serious offence, prior to working with children⁴⁰. This duty is especially relevant to aquatic activity as several State and Territory Department of Education safety policies specify that volunteers and adults, that are not teachers, may be included in supervision ratios or utilised to provide additional supervision when undertaking aquatic activities³¹.

Departmental policies also make reference to child protection legislation and venues for aquatic activity. For example venues must be chosen to prevent or minimise the risk of intrusion into the school group by uninvited members of the public ⁴¹.

Venues

Departmental safety policies also make reference to legislative requirements for aquatic locations that supervisors and staff must be aware of when conducting aquatic activity and water safety education. For example, the NSW Guidelines for the Safe Conduct of Sport and Physical Activity in School for swimming and water safety state that venues used for aquatic activity must:

- Be fenced in accordance with statutory requirements for fencing ⁴²
- Display signage that conforms to relevant Australian Standards (AS) and meet all statutory requirements that apply
- Monitor water quality regularly to meet Department of Health standards ⁴³
- Have a pool, pool deck, fittings and fixtures that conform to any industry or statutory requirements that apply such as the GSPO Facility Design guidelines ²² (NSW Department of Education and Training) ²⁸.

It is important that teachers and school staff are aware of these requirements and employ a risk management approach to aquatic activities as a means of satisfying their legislative duties.

Industry Guidelines

In addition to Occupational Health and Safety legislation and Department of Education safety policies and guidelines, there are also a number of industry guidelines relevant to primary school aquatic activity. These include the Guidelines for Safe Pool Operation (GSPO), Guidelines for Water Safety in Commercial Learn to Swim and School Pools and AUSTSWIM Guidelines. An identification, summary and analysis of Industry guidelines relevant to aquatic activity has been undertaken.

Aims

The aims of this review were to:

- Identify and summarise industry guidelines relevant to primary school aquatic activity
- Analyse the content of the guidelines and determine relevancy of content to primary school aquatic activity
- Identify where improvements can be made to protect the safety of teachers, supervisors and students undertaking aquatic activities at primary schools.

Guidelines for Safe Pool Operation (GSPO)

The Guidelines for Safe Pool Operation (GSPO) are a set of best practice guidelines for the safe operation of public pools and aquatic facilities. They have been developed in consultation with industry and expert personnel and are subject to ongoing review. The GSPO includes a range of policies relevant to the safety of primary school children and supervisors when visiting a public pool²².

Compliance with the GSPO nationally is unknown, however in Victoria a study examining compliance with relevant aquatic industry standards and guidelines at council owned public swimming pools was undertaken during the 2006-07 financial year⁴⁴. Of the 27 aquatic facility safety audits undertaken, the average compliance rate was 71%⁴⁴.

Whilst the GSPO represents best practice and is updated on a regular basis to ensure the most relevant information is included, the guidelines are voluntary. There is currently no information available nationally about the number of centres who have access to, use and comply with any or all of the guidelines.

Analysis relevant to school based aquatic activities

The GSPO aims to ensure safety at pools by providing a set of minimum standards for pool operators. While all of the guidelines are relevant to improving the safety at aquatic facilities, those around maintenance, first aid, emergency action plans, rescue equipment, and supervision directly improve the safety of primary school children at an aquatic facility.

For teachers and supervisors of primary school students the GSPO includes information on standards of swimming teacher education, qualifications and emergency procedures. The information on supervision is also relevant, but is directed more towards the operator of the facility.

The first aid section of the GSPO specifies the contents of a first aid kit for aquatic facilities, including recommended optional items (FA3)²². The need for employee awareness of first aid is also specified (FA1), which outlines a minimum standard of training in employee awareness of first aid²². Whilst the first aid section is aimed at employees of aquatic facilities, the knowledge could also be utilised by staff and supervisors conducting primary school aquatic activity²².

The Supervision guidelines cover topics such as bather supervision (SU1), encouraging responsible behaviour (SU2) and the supervision of children (SU3). The majority of the supervision guidelines, focus on lifeguard duties and qualifications ²².

The Programs section of the GSPO outlines standards of swimming teacher education (PR1). This guideline recommends that the minimum qualification for swim teachers is a current AUSTSWIM Teacher of Swimming and Water Safety Certificate ²². It is also the employer's responsibility to check the status and currency of an individual's qualifications and the ability of the person to perform the activities related to that position.

A second guideline specifies swim teacher qualifications for safe aquatic programs (PR10) and aims to establish the minimum standard of accreditation for those employed or contracted to act as instructors of aquatic programs ²². Consideration of the safety of participants is to be a primary concern when planning and managing a class.

The guidelines recommend that a current CPR qualification is held by instructors (issued by a recognised organisation), a recognised minimum qualification for instruction of the programmed activity (provided that the qualification includes a water safety and rescue component) and additional recognised water safety qualifications that may be appropriate to the program venue ²². For school age children, the guidelines state that an AUSTSWIM Teacher of Swimming and Water Safety qualification is recommended ²².

The teacher to pupil ratios (PR4) guideline recommends:

- For the teaching of beginners with little or no experience in shallow water the maximum ratio is one teacher to ten pupils (1:10) in a swimming pool and (1:6) in open water.
- For the teaching of intermediate pupils (that is those that are able to achieve basic skills and can swim 25 metres with a recognisable stroke), the recommended maximum ratio for a swimming pool is (1:12) and (1:10) in open water.
- For the teaching of advanced learn to swim pupils (that is those that are able to swim 50 metres using two recognisable strokes and demonstrate one survival stroke in deep water), the recommended maximum ratio in a swimming pool is (1:15) and (1:12) in open water ²².

It is recommended for groups with special needs, such as people with severe disabilities, a ratio of one on one may be required. The above ratios are offered based on safety considerations and not on ratios considered ideal for effective teaching ²².

Guidelines for Water Safety in Commercial Learn to Swim and School Pools

The Guidelines for Water Safety in Commercial Learn to Swim and School Pools were created by RLSSA to provide direction and assistance in the areas of water safety, injury prevention and best practice management. The intended audience is swimming pool and facility operators, industry bodies and pool staff ⁴⁵. These Guidelines echo the first aid information provided in the GSPO.

Analysis relevant to school based aquatic activity

Whilst these guidelines are aimed at operators of commercial swim schools, these guidelines also include relevant safety information for supervisors of primary school aquatic activity. The guidelines are also relevant as many schools utilise these facilities for their aquatic activity. This includes information on supervision and programs.

The Supervision section outlines minimum ages of those to be in charge of supervising aquatic activity (16 years old), minimum qualifications (RLSSA Bronze Medallion or similar), and recommends supervisors hold a current CPR qualification from a recognised provider (CLS16)⁴⁵. The parental supervision guideline (CLS17) emphasise the need for constant active supervision by parents of young children. This advice is also valuable for those supervising children during school based aquatic activity⁴⁵.

The Programs section of this document predominately replicates the information from the GSPO. Included in the guideline (CLS32) is information for swim school class excursions and procedures required when conducting an excursion: emergency management planning, excursion approval, consent for student participation, medical information, supervision ratios, emergency documentation and staff qualifications for excursions⁴⁵.

Whilst these guidelines may be aimed at pool staff, these guidelines are also useful for consideration when undertaking primary school based aquatic activity as the guidelines take a best practice approach and have been developed in consultation with industry. The information contained in the guidelines is consistent with relevant State and Territory legislation and most Department of Education policies. As with other best practice documents, these guidelines need to be reviewed regularly in consultation with industry to ensure the information presented in the guidelines continues to be best practice.

AUSTSWIM Guidelines

The Australian Council for the Teaching of Swimming and Water Safety (AUSTSWIM) publishes a number of guidelines with information relevant to teachers and supervisors of aquatic activity at primary schools across Australia. These guidelines may be utilised to improve the safety of aquatic education for school aged participants.

There are three AUSTSWIM guidelines for teachers of swimming and water safety that are relevant to primary school aquatic activity, Guidelines to Teaching Swimming and Water Safety Programs, Aquatics to People with a Disability Programs, and AUSTSWIM Teacher Code of Behaviour. An examination and analysis of the content is provided below.

Guidelines to Teaching Swimming and Water Safety Programs

The Guidelines to Teaching Swimming and Water Safety Programs is for teachers of swimming and water safety, parents and pool management⁴⁶. The overarching principle of the guideline is that aquatic activities should be a happy experience for all students and regardless of their ability, children should always be under adult supervision⁴⁶.

The guidelines include information about what is required prior to an aquatic program being conducted, qualifications of the teacher and supervisors, student teacher ratios and activities that can be conducted at particular venues.

Information and action required prior to the program commencing includes obtaining a student's medical records and updating them on a regular basis, ensuring the pool and associated facilities to be used are maintained according to State and Local authority standards with respect to safety and water purity⁴⁶, and conducting an evaluation of the venue to be used.

The AUSTSWIM Council has established its own policy on teacher students ratios and recommends that swimming and water safety programs conducted as part of a Physical Education curriculum should also be conducted in accordance with these ratios ⁴⁶. Three venue types are discussed: confined shallow natural water and swimming pools (venue type 1), deep open water venues; such as non-surf beaches, lakes, rivers and dams (venue type 2) and surf beaches (venue type 3) ⁴⁶.

For all venues there are to be a minimum of two AUSTSWIM teachers or one AUSTSWIM teacher and a supervisor who holds an award relevant to the venue (such as a pool lifeguard for venue 1, a bronze medallion qualification for venue 2 and a surf lifesaving bronze medallion or surf rescue certificate for venue 3). All qualifications are to be current ⁴⁶.

Aquatics to People with a Disability Programs

This draft guideline states that programs should be conducted by an instructor with an AUSTSWIM Teacher of People with a Disability Certificate, which is recognised as the minimum qualification ⁴⁷. Involvement should be at a pace and level appropriate to an individual's ability and skill. Medical information and release forms should be fully documented prior to participation. Aquatic facility staff must be informed of any potentially serious health and or behavioural management issues that may impact upon aquatic involvement ⁴⁷, particularly if assistance is required should an incident occur. This extra level of safety should be adopted by staff and supervisors of primary school based aquatic activity for students with disabilities ⁴⁷.

Duration of sessions should be modified to ensure that group and individual needs are met and students are not over extended ⁴⁷. With respect to teacher to student ratios, AUSTSWIM recommends that these vary according to the type of disability and the level of the teacher's aquatic skill. A student with high support needs will require supervision by an AUSTSWIM qualified teacher in a ratio of 1:1 ⁴⁷. The policy recommends that a student's behaviour be assessed prior to placement within aquatic programs to reduce potential risks to health and safety for the student, instructors, supervisors and other students.

AUSTSWIM Teacher Code of Behaviour

The AUSTSWIM Teacher Code of Behaviour guideline aims to encourage public confidence in aquatic education by providing a benchmark for appropriate behaviour and ensure that AUSTSWIM trained/employed teachers adhere to a standard of practice ⁴⁸.

All trainees for and holders of AUSTSWIM awards are to abide by the AUSTSWIM Teacher Code of Behaviour by ensuring that they teach within the limits of the competences deemed by the AUSTSWIM award(s) they hold and maintain those qualifications and participate in regular professional development ⁴⁸.

The Code of Behaviour guides teachers to promote and deliver safe and enjoyable aquatic activities, to show concern for the health, safety and welfare of participants and colleagues ⁴⁸. ensure that the methods used are consistent with established practices, and follow policies and guidelines relating to safety, class ratios, emergency procedures and duty of care ⁴⁸.

All trainees for and holders of AUSTSWIM awards are also instructed to ensure that all people can have access to learning swimming, water safety and survival skills and are to modify their program to cater to those with different needs such as people with disabilities and injuries or adult learners ⁴⁸.

Analysis

Overall the AUSTSWIM guidelines are comprehensive. These documents are applied nationally, thorough, developed in consultation with industry, accepted as best practice by the major water safety organisations in Australia (Royal Life Saving, Surf Life Saving, Swimming Australia) and are currently the only guidelines specifically for Australian based swim teachers⁴⁶. However, this should not imply that these guidelines cannot be improved and a specific focus should be directed towards extending and improving the evidence base.

Whilst these guidelines can promote safety and enhance learning, there is currently no information available regarding levels of compliance by swim schools and instructors. Further research into how people engage with these documents may improve compliance levels.

There is a need for the AUSTSWIM Teacher Code of Behaviour to refer to the specific guidelines 'Teaching Swimming and Water Safety Programs' and 'Aquatics to People with a Disability Programs'. This would ensure that the guidelines and teacher code of behaviour are consistent and make readers of one document aware of the existence of other relevant guidelines. Teacher student ratios and supervisor qualifications are consistent with departmental of education swimming policies. Where possible, the AUSTSWIM guidelines should be consulted when reviewing Department of Education safety policies and guidelines.

AUSTSWIM guidelines were last reviewed in December 2002. To ensure these guidelines remain best practice they should be reviewed as soon as possible and then on an ongoing basis in consultation with industry, other water safety agencies, swim teachers and their clients (e.g. students and/or parents). To ensure the updated guidelines reach the largest number of people possible, when available they should be published on the AUSTSWIM website and swim teachers and administrators should be made aware of the updates.

Case Study: Inspector Kilpatrick v The Crown in the Right of the State of New South Wales (Department of Education and Training) 2006

Background

On October 29, 2002, Ms Helen Taylor, a teacher's aide special, died as a result of injuries sustained on a school excursion to an aquatic location. Ms Taylor and another teacher had taken a group of seven intellectually disabled secondary students from Newcastle School (Special) on an excursion to Lemon Tree Passage in the Port Stephens area⁴⁹.

Ms Taylor took five members of the group to participate in aquatic activities in a fenced off tidal river pool⁴⁹. Whilst the other teacher was away from the area, Ms Taylor had to go to the aid of another student (LC) to prevent him from walking into the deep end, where the water was over two metres deep. LC pulled Ms Taylor down under the water twice, after which time Ms Taylor managed to break free of LC's grip and lead him back to the water's edge⁴⁹.

When the second teacher returned, Ms Taylor was lying in the shallow water and having trouble keeping her head out of the water and she was subsequently taken to hospital by ambulance. Over a period of two weeks her condition deteriorated and she died. An autopsy revealed Ms Taylor had died from Adult Respiratory Distress Syndrome (ARDS) caused by near drowning⁴⁹.

Outcome

The Court found that Ms Taylor had been placed in a situation of serious risk. As a result of this incident the NSW Department of Education and Training (DET) was found guilty by the NSW Industrial Relations Commission of breaching its duties to its employees (teachers) under the Occupational Health and Safety (OHS) Act 2000. The Department was fined \$225,000 by the Commission in 2006⁴⁹.

There were a number of failures in relation to safety that led to this incident occurring:

- DET's failure to provide information, instruction and training to ensure "...its employees were aware of and complied with the 'Guidelines for the Safe Conduct of Sport and Physical Activities in Schools'..." (pg 4)⁴⁹ in accordance with duties outlined in the OHS Act 2000.
- A failure to ensure that a minimum of two adult supervisors with qualifications and/or expertise appropriate to swimming were present at all times outlined in the DET's Guidelines.
- A failure to consider that the supervision requirements for students with disabilities will vary and need to be assessed accordingly⁴⁹. This include attention to the specific medical needs and fitness levels of students, the suitability of, and access to, facilities for students with restricted mobility and "...the possible need for integration aides and trained volunteers with specialist expertise and qualifications who might advise on adaptations and improvisation before and during the activities..." (pg 2)²⁸, and the student's swimming abilities must be assessed prior to entering the water.

The school's principal was not aware of the existence of these guidelines until after the incident and as such could not communicate the existence of the content of the guidelines to staff.

Under the OHS Act 2000, the Department failed to maintain a safe system of work and working environment for Ms Taylor on the excursion. The Department was also found to have failed to ensure that "...an adequate risk assessment was conducted in relation to the nature of and participants in the excursion..."(pg 4)⁴⁹. Commentary

This case highlights the importance of having effective safety measures in place for school aquatic activity, and demonstrates the tragic outcomes that can result where such measures are not adopted. Several key factors are evident from this case. These include:

- The importance of Education Departments and schools developing safety policies and practices for aquatic activity;
- The need to ensure such policies and practices are communicated to all staff and other relevant parties, and effectively implemented; and
- The crucial role that a risk management approach, including risk assessments, play in ensuring the safety of teachers, students and other relevant parties when undertaking aquatic activity.

A thorough risk assessment would have assessed the depth of the pool, the swimming ability of the students, adequate supervision (that is if one person was sufficiently able to supervise five students, given the size and depth of the pool and the intellectual disabilities of the students), Ms Taylor's swimming ability, the prospect of the students becoming unmanageable (particularly LC with a history of unpredictable behaviour)⁴⁹.

This case has potential implications for the provision of aquatic activity at primary schools. The first implication is that there is the potential for a decrease in school based aquatic activity due to the fear of legal consequences. This issue is significant as the provision of education is vital to drowning prevention and has wider benefits, on physical health and wellbeing. However, the court findings clearly identify that this incident could have been avoided. Rather than discourage schools from undertaking aquatic activity, this case should be used to inform the development, implementation and improvement of safety policies and practices.

The implications of this case on Departmental policies and procedures are difficult to determine with any certainty. However, the NSW Department of Education and Training released a corporate safe work strategy entitled 'Safe Working and Learning'. This three year plan, published in 2005, aimed to improve health and safety across all its workplaces by "...ensuring a safe working and learning environment for all staff, students and workplace visitors..." (pg 58)⁵⁰.

'Safe Working and Learning' included providing OHS training to school principals focusing on injury and risk management and student behaviour⁵⁰. It also aimed to increase safety awareness and improve understanding of OHS in the workplace⁵⁰. It is not known whether the incident that led to Ms Taylor's death contributed to the decision to develop and implement this strategy.

Literature Review

A literature review was conducted to identify key issues in aquatic safety at primary schools for both supervisors and students.

Aims

The aims of the literature review were:

- To review the literature on aquatic activity at primary schools
- To identify key issues associated with undertaking aquatic activity at primary schools
- To examine recommendations made in relation to aquatic activities at primary schools

Methods

Keyword searches of the literature were conducted between December 5 and 7, 2007 using the following databases and journals:

- A+ Education (Informit database)
- ProQuest Education Database
- European Physical Education Review
- Education Resources Information Centre [ERIC] (Ovid Database)

Keywords used were: water safety, education, water, safety, aquatic, school, swim, drowning and prevention.

A snowballing technique was used, that is a process where key books or articles are identified, and their reference lists are examined to find earlier material, keywords and authors details, which are then used in additional searches on a subject area ⁵¹.

Inclusion/Exclusion Criteria

Much of the literature found through the literature review was excluded because it focused on education and water sustainability or the safety of drinking water as opposed to water safety education.

Search Strategy

The terms 'water safety' + 'education' were used to search A+ Education (Informit database) using the full text limit. Three results were found. One was relevant to this issues paper ('Issues beyond drowning' by Whipp and Taggart ⁵²).

The terms 'water' + 'safety' were also used to search the same journal, returning 97 results. One was relevant to this issues paper ('Water Activities a great way to teach' by Nosworthy ⁵³). The terms 'aquatic' + 'education' returned 3 results (of which the Whipp ⁵² article was returned again as the only relevant document).

The terms 'drowning' + 'prevention' returned no results in the A+ Education database. The terms 'swim' + 'education' returned 9 results. One was relevant to this issues paper ('Teaching swimming in secondary schools' by Whipp ⁵⁴).

A review of the available literature in the ProQuest Education database was also conducted. The terms 'swim' + 'education' were searched in citations and abstracts with a limit to full text records. This search returned 71 documents. One was relevant ('Teaching water safety in K-12 education' by Young and Herring⁵⁵).

The terms 'water' + 'safety' returned 33 results in the ProQuest Education database. Of these results, the majority focused on the safety of drinking water and no other articles were found to be relevant to this paper.

A review of the European Physical Education Review was also undertaken. The terms 'water' + 'safety' returned 401 publications. This search was then refined using the terms 'water' + 'safety' + 'school'. This search returned 3 results. One ('Sport, Health and Physical Education: A Reconsideration' by Waddington et al⁵⁶) was relevant to this paper.

The terms 'swim' + 'education' returned 318 results. The majority of these results focused on teacher induction and mentoring. Only two articles were relevant to the issues paper ('Profiling sport role models to enhance initiatives for adolescent girls in physical education and sport' by Vescio et al⁵⁷ and 'Sporting excellence, schools and sports development: The politics of crowded policy spaces' by Houlihan⁵⁸).

The Education Resources Information Centre [ERIC] (Ovid database) was reviewed for relevant literature. The terms 'swim' + 'education' returned 112 results. When limited to full text results, 25 articles remained, one of which ('Aquatics and Persons with Disabilities'⁵⁹ was relevant to this issues paper.

The terms 'water' and 'safety' returned 585 results in ERIC. When limited to full text articles, the search returned 132 results. Of these results, 6 articles relevant to this paper were identified on such topics as water and boat safety at schools and a World Health Organisation (WHO) report on the role of schools in health promotion⁶⁰.

The snowballing technique also yielded a number of other relevant articles including: 'Education in Schools: Surveying the Facts' by David Cross⁶¹, 'Primary School Physical Education: Far from realising its potential' by Dr. Phillip Morgan⁶, 'Curricular Physical Activity and Academic Performance' by Roy J. Shephard⁶², 'Physical education, youth sport and lifelong participation: the importance of early learning experiences' by David Kirk⁶³ and 'Outdoor education fatalities in Australia 1960-2002' by A. Brookes⁶⁴.

This search strategy used resulted in a total of 14 articles, papers, or reports included in this literature review.

Analysis

The article by Brookes on fatalities occurring during outdoor education in Australia between 1960 and 2002 explored past incidents to determine common elements or patterns⁶⁴. The research found fatalities had occurred as a result of drowning, falls, falling rocks, sand, trees and tree branches, hypothermia, fire and lightning, motor vehicles, homicide/suicide and natural causes.

With respect to primary school aged fatalities involving water, Brookes' article identified 5 deaths in the past 48 years⁶⁴. All five drowning deaths occurred whilst on school excursions and occurred at a

dam, lake or pool. In three instances, students drowned in pools, one student in a school pool and two in public aquatic centre pools. In two of these instances, inquests are currently pending to determine the events leading to the death, however in one case a student who was a weak swimmer drowned in a diving pool whilst unsupervised. The coroner in this case ruled that the parents utilised to assist in supervision were not qualified to do so ⁶⁴.

A lack of adequate supervision also appears to have contributed to the drowning death of another student, as three staff members were supervising 38 students however an inquest is pending in this case. In another drowning death, the absence of a student was only noticed several hours after aquatic activity was conducted, which would also suggest a lack of supervision and inadequate risk management ⁶⁴. The Brookes article offers no recommendations.

‘Physical Education: Far from realising its potential’ by Dr. Phillip Morgan ⁶ examined physical education in schools from an Australian perspective. This article discussed the importance of physical activity in the early years of a child’s life and identified poor quality physical education programs in schools as being one of the key factors contributing to the poor health profile of Australian children ⁶. This article reported that quality physical education can encourage the “...development of healthy attitudes and practices towards leading an active lifestyle...”(pg 20) ⁶ and identified physical education in primary schools as the “...the most appropriate forum for the development of fundamental motor skills” (pg 20) ⁶.

Given the importance of quality physical education, Morgan states that students will achieve more favourable levels of outcome attainment if they experience lessons which are implemented by “...competent and confident teachers who are committed to teaching PE...” (pg 21) ⁶. As such Morgan recommends that increased support be provided to teachers (via both improved pre-service and in-service training) or the employment of specialist PE teachers as a priority ⁶.

The Kirk article ⁶³, entitled ‘Physical education, youth sport and lifelong participation: the importance of early learning experiences’ discussed the effect of physical education on lifelong participation in physical activity. The article stated that early skill development and positive attitudes towards sport have an impact upon participation in physical activity in adulthood and may be useful in addressing the low participation rates of children, particularly girls in physical activity ⁶³.

Kirk finds that there is evidence that the content and forms of delivery of primary and secondary school physical education programs are ineffective and recommends that resources need to concentrate on the younger age groups to improve participation levels that may form the basis for lifelong participation in physical activity ⁶³. Kirk also recommends that specialist teachers of PE should be employed to work with general teachers and volunteers ⁶³.

‘Curricular Physical Activity and Academic Performance’ by Shephard ⁶² discussed the effect of quality physical education on academic performance. The article found that when a substantial proportion of curricular time is devoted to physical activity, “...learning seems to proceed more rapidly per unit of classroom time...”(pg 113) ⁶².

Children receiving additional physical education demonstrated an acceleration in psychomotor development and it was purported that this may be a mechanism for accelerated learning. The article also reported that physical activity creates positive self-esteem, a change in hormone levels,

enhanced nutrient intake and increases the flow of blood to the brain, all of which can have a positive effect on the manner in which students learn⁶².

Shephard recommends that schools should introduce daily programs of quality physical education in order to develop healthy habits⁶². The article states that the introduction of these programs should begin at an early age, preferably beginning in the youngest grades of primary school⁶².

'Aquatic Education in Schools: Surveying the Facts' by David Cross⁶¹, detailed the findings of a survey commissioned by VICSWIM in 1995 of more than 1,100 schools (predominately primary) in Victoria. The survey aimed to highlight the pressures being placed on schools and the issues that need to be addressed in order to improve the quality of "...aquatic programming for students..." (pg 53)⁶¹.

The issues identified by the almost 400 respondents included increasing workloads, a changing legal environment, time and cost constraints and difficulties in providing adequate numbers of appropriately trained staff⁶¹. The survey found that 93% of respondents ran a school swimming program, however there were some reasons respondents offered as to why students may not participate in an aquatics program that is on offer, such as cost, medical reasons and existing access to private swimming lessons⁶¹.

The survey found that the overwhelming majority of respondents (80 – 90%) of those surveyed offered swimming and water safety as opposed to water safety or swimming (stroke development) programs only, which reinforces the view that both are integral to a rounded aquatic education program⁶¹. The study recommends a coordinated and cooperative approach to development in three key areas: aquatic professional development/training, aquatic curriculum course advice/resources and low cost water safety programs⁶¹.

The study by Whipp and Taggart (2003) investigated the status of swimming and water safety programs in secondary schools in Western Australia. 'Teaching swimming in schools: Issues beyond drowning' surveyed health and physical education heads of department to determine the activities undertaken, planned outcomes, issues of concern and pedagogies employed to deal with different ability levels in their compulsory Year 8 swimming programs⁵².

The research identified staff/student ratios, coping with varied swimming skill levels and legal liability as key concerns. This article also identified the value placed on aquatic programs with teachers generally considering aquatics to be an important component of Health and Physical Education programs⁵².

The Whipp and Taggart article found that some schools found it difficult to meet the needs of the weak or non-swimmer and the strong swimmer alike⁵². The article found that instruction tends to focus on the mid range swimmer which can result in a loss of motivation for the non and strong swimmers. As such the article recommends that teaching techniques such as streaming, peer teaching and the differentiated classroom (a strategy which targets the levels of each student through differentiation by task, outcome and support⁵²) as more inclusive strategies that may be worthy of further investigation⁵².

Summary

Overall the literature review identified that fatalities associated with school based aquatic activities are low, with 5 deaths identified in the last 48 years⁶⁴. Further support for the inclusion of physical

education in school curricula is provided by literature which states that physical education's effect on children is overwhelmingly positive^{6 62 52}. Quality physical education and physical activity have been found to support healthy attitudes and practices, increase physical activity⁶, promote positive self esteem and enhance learning⁶².

Two articles in particular focused on aquatic activity in schools and the safety issues facing teachers and supervisors. The key issues found to be affecting teachers and supervisors of primary school aquatic activity were: increased workloads, a changing legal environment, time and cost constraints, difficulties in providing adequate numbers of appropriately trained staff⁶¹, staff/student ratios, coping with varied swimming skill levels and legal liability⁵².

The literature review identified that little research has been conducted in the area of safety of primary school aquatic activity in Australia.

Issues associated with school based aquatic activity

This paper identified six areas of safety implications associated with undertaking school based aquatic activities. In some instances these issues become barriers to schools conducting aquatic education programs. Key issues identified include:

- Qualifications of both supervisors and instructors of aquatic activity
- Differences in skill level of students
- Water depth
- Class sizes (student to staff ratios)
- Risk management and risk assessments
- Costs

Qualifications of both supervisors and instructors of aquatic activity

Supervisors and instructors of aquatic activity should possess relevant and current qualifications. There is a minimum requirement in NSW²⁸, NT³⁰ and QLD³² stipulated in Departmental and industry guidelines^{22 45 46}, stating:

- People instructing aquatic activity should hold a current AUSTSWIM Teacher of Swimming and Water Safety Certificate,
- Staff instructing students with disabilities should hold a current AUSTSWIM Teacher of People with a Disability Certificate as a minimum⁴⁷,
- Staff and supervisors of primary school aquatic activity should also have current first aid and resuscitation qualifications, and
- Be able to render emergency care and effect a rescue if needed.

Appropriately qualified instructors and supervisors are vital to improving the safety and success of the school's aquatic program. Ensuring staff and supervisors attain these qualifications is evidence of their competency in instructing aquatic programs and their knowledge of safety procedures.

It is vital that these requirements be incorporated into departmental policy, where this is not already the case.

Differences in skill level of students

Differences in the skill levels of students is another safety issue associated with undertaking learn to swim and water safety education at a primary school level. Differences in skill level pose a safety risk for instructors and other students. Mixed skill levels creates difficulties for teaching as programs need to be modified for different ability levels of students and may require different teacher to student ratios.

In order to minimise the risk that different skill levels may pose, a student's ability should be assessed prior to undertaking aquatic activity. Assessing student ability is vital to improving the safety of aquatic activities and may assist in complying with other policy requirements (such as ensuring that beginners and non-swimmers are educated in a certain depth of water).

Students may also be grouped according to skill level for ease of instruction, supervision and program delivery.

Water depth

The depth of water utilised for learn to swim and water safety education is an important safety consideration, as the depth needs to be appropriate for the activity being undertaken (e.g. deep water for diving) and the skill level of students (water no deeper than arm pit height for beginner students, and non-swimmers).

While ensuring the depth is appropriate to reduce the likelihood of an adverse incident, the instructor also needs to ensure the depth is appropriate for beginners. Making children feel safe in the water will help provide a happy experience for the students and facilitate their participation.

Class sizes (student to staff ratios)

The size of classes and the ratio of students to staff is another key safety issue associated with school based aquatic activity. Unmanageable class sizes negatively impacts upon the ability of instructors to supervise students effectively. Classes that are too large also impact upon the ability of students to learn as they place limits on the amount of time a teacher can devote to an individual student.

The majority of Department of Education policies and industry guidelines specify minimum ratios of staff to students when undertaking aquatic activity. These are based on the skill levels of students in order to maximise safety of school based aquatic programs and are not based on ratios for effective teaching. It is also important to employ different ratios for different aquatic environments, such as deep water, shallow water and open water, as these may pose different safety risks.

Risk management and risk assessments

The need to minimise risks to health and safety is another key issue associated with primary school based aquatic activity identified in this paper. Risk assessments are vital for identifying and addressing hazards and risks to both staff and students. A risk assessment identifies risks before they occur and will ensure that programs and aquatic venues are as safe as possible.

The duty to undertake a risk assessment is included in a majority of departmental excursion policies but appear in few swimming and water safety policies. This duty should be both incorporated into swimming and water safety guidelines and promoted as a critical element of the document. Although undertaking a risk assessment is not a legal duty, it can help to satisfy other legal duties such as ensuring the health and safety of employees and third parties. Results of risk assessments may also inform subsequent development of school and departmental based policies and guidelines with respect to aquatic activity.

Costs

Under school excursion policies, a number of issues were raised with respect to the cost of accessing aquatic locations for school based aquatic activity. Most schools do not have aquatic facilities and must utilise venues outside of the school grounds. As a result schools incur fees when students need to be transported to suitable aquatic locations.

The costs associated with running an aquatic program may also limit the choice of facility being utilised. Department of Education excursion guidelines state that the safest facilities must be utilised for school based aquatic activity, however the proximity of facilities to the school ground and thus the costs associated with transportation are often the key determinant for choice of venue.

Costs associated with transportation can prevent schools from undertaking aquatic activity at a wider range of locations (for example natural waterways) and may entirely prevent schools with students from low socio-economic backgrounds from conducting an aquatics program. Accessing privately run aquatic centres may also result in increased costs. As such, ensuring equity of access to swimming and water safety education is an important consideration.

Discussion

When conducting school based aquatic activity, employers and principals have legal obligations to ensure the health and safety of students and supervisors. Occupational health and safety legislation confers legal obligations on employers and people in control of workplaces (principals) to ensure the health and safety of employees at work, to protect employees from workplace hazards, to provide information, instruction, training and supervision, and to ensure the safety of third parties.

However, the nature and extent of these obligations differs between the States and Territories. Also under occupational health and safety legislation, an employee has a duty to act in a manner that protects their own health and safety whilst at work.

There is also a legal obligation in every State and Territory in Australia to ensure that people in specific child-related occupations undergo a working with children check²⁵. This ensures that employees do not have any convictions for crimes against children or relevant crimes against adults and aims to provide a safe environment within which children can be educated.

Strengthen Department of Education policies and guidelines

Department of Education policies and guidelines on aquatic activity and excursions are also in place in all States and Territories. These policies aim to improve safety and assist staff and principals in fulfilling legislative responsibilities. The policies outline minimum supervision ratios, minimum qualifications for instructors, venue requirements (such as water depth) and safety measures (such as collecting medical information, assessing student ability and employing buddy systems). Other safety issues that need to be incorporated into policies and guidelines include maximum water depth for different skill levels, best practice supervision ratios and qualifications for instructors and supervisors and that a risk assessment is undertaken prior to any aquatic activity.

The analysis of State and Territory Department of Education policies found that clarity is lacking in some documents. Policies must be clearly articulated to ensure the reader understands their obligations with respect to ensuring the health and safety of staff and participants. Similarly, by ensuring that effective policies are developed and implemented, legal concerns that may present barriers to providing aquatic activity can be addressed.

National consistency in policies and guidelines is desirable, as all policies should represent best practice and therefore be the same. Nationally consistent policies and guidelines would also assist employers operating in more than one State and Territory as well as staff who move between States and Territories.

Recommendation: All Department of Education policies and guidelines relevant to school based aquatic activity should be strengthened as follows to:

- Clearly reflect all legislative duties of aquatic activity supervisors.
- Ensure evidence where available informs the development and regular review of policies and guidelines.
- Require a risk management approach to aquatic activities be taken.
- Regularly review and monitor policies and guidelines
- Develop a plan to work towards national consistency in aquatic activity policies for all schools.

Promote policies and guidelines

While having policies in place is important, the Taylor case demonstrated the critical role of communicating and implementing Department of Education policies and guidelines. There were a number of failures in safety that led to the death of Ms Taylor, which if departmental policies had been followed may have prevented the deaths. These failures included: lack of information, instruction and training to staff about water safety; inadequate supervision for disabled students; no assessment of the abilities of students prior to entering the water; failure to maintain a safe system of work under OHS legislation and to ensure an adequate risk assessment was undertaken ⁴⁹.

The Taylor case also highlighted the importance of performing a risk assessment prior to undertaking any aquatic activity or conducting excursions to aquatic locations. Had a risk assessment been undertaken, a number of these safety failures would have been addressed prior to the incident and the risk of Ms Taylor drowning would have been significantly reduced. Policies and guidelines content must be communicated to all relevant people, including school staff, volunteers, aquatic centre staff and swimming instructors. The Taylor case notes identified that the school's principal was unaware of the existence of the relevant guidelines until after the incident and thus could not communicate the content of the guidelines to staff ⁴⁹.

Recommendation: All school based aquatic policies and guidelines are widely promoted to school staff and key participants (including volunteer supervisors, aquatic centre staff, swimming instructors and aquatic safety organisations).

All children provided with education in swimming and water safety

One of the risks of school based aquatic activity although slim (5 deaths in the last 48 years ⁶⁴) is drowning. However by teaching children swimming skills and survival techniques they are better equipped to save themselves from drowning. Educating children on rescue techniques and skills may also help students assist others should they get into difficulty in the water.

Aquatic activity and water safety education have a number of other benefits for Australian children. The teaching of practical swimming and survival skills in the water is an excellent form of physical activity for children whilst also providing education. With the increasing rates of childhood obesity in Australia, practical swimming and water safety education provides an opportunity for fitness and increased physical skill in young children, whilst promoting healthy attitudes and practices ⁶. Literature has also attributed quality physical activity as having a positive impact upon self esteem and enhancing learning ⁶².

Recommendation: All Australian children must be provided with the opportunity to learn basic survival and swimming techniques.

Ensure appropriate levels of funding

In order to increase the likelihood of aquatic activity being undertaken and to ensure that all Australian children are exposed to the wider health and social benefits of learning to swim, associated costs need to be minimised. This will ensure that all children can participate regardless of socio-economic background.

Recommendation: Appropriate levels of funding are provided to ensure that all primary school students receive quality education in swimming and water safety

Recommendations

Following the identification, summary and analysis it was identified that there are three key areas where improvements could be undertaken to improve the safety of school based aquatic activity:

Policies/Legislation/Guidelines

- All Department of Education policies and guidelines relevant to school based aquatic activity should be strengthened as follows to:
 - Clearly reflect all legislative duties of aquatic activity supervisors.
 - Ensure evidence where available informs the development and regular review of policies and guidelines.
 - Require a risk management approach to aquatic activities be taken.
 - Regularly review and monitor policies and guidelines
 - Develop a plan to work towards national consistency in aquatic activity policies for all schools.

Communication

- All school based aquatic policies and guidelines are widely promoted to school staff and key participants (including volunteer supervisors, aquatic centre staff, swimming instructors and aquatic safety organisations).

Water Safety

- All Australian children must be provided with the opportunity to learn basic survival and swimming techniques.
- Appropriate levels of funding are provided to ensure that all primary school students receive quality education in swimming and water safety.

Contributors

This issues paper was developed by Amy Peden, Richard Franklin and Penny Larsen from the Royal Life Saving Society Australia. It is hoped that school staff and all involved in school based aquatic activity benefit from this paper.

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Glossary

ACHPER	Australian Council for Health, Physical Education and Recreation
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
AS	Australian Standards
ASCTA	Australian Swimming Coaches and Teachers Association
AUSTSWIM	Australian Council for the Teaching of Swimming and Water Safety
AWSC	Australian Water Safety Council
Bands	Broad stages in a sequence for developing knowledge, understanding and skills in a learning area ⁶⁵
CALD	Culturally and Linguistically Diverse
CPR	Cardio-pulmonary resuscitation
DEET	Department of Employment, Education and Training
DET	Department of Education and Training
Drowning	The process of experiencing respiratory impairment from submersion/immersion in liquid ² .
Excursion	A school-related activity by students, under the supervision of a teacher/s, directly related to the curriculum of the school. An excursion is a variation to normal activity and is not predominately recreational ²⁶
GSPO	Guidelines for Safe Pool Operation
HAPE	Health and Physical Education
HSC	Higher School Certificate
Injury	The transfer of energy to a person at rates and in amounts above the tolerance of human tissue. The amount of the energy concentration outside the tolerance of tissue determines the severity of the injury (physical, mechanical, chemical, kinetic etc) ⁶⁶
Lifelong Learning	A continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments ⁶⁷

LOTE	Languages Other than English
NCPC	National Child Protection Clearinghouse
NSW	New South Wales
NT	Northern Territory
NWSP	National Water Safety Plan
OHS	Occupational Health and Safety
PD/H/PE	Personal Development/Health/Physical Education
PE	Physical Education
PFDs	Personal Flotation Devices
QLD	Queensland
Risk	The likelihood of an injury, illness or disease occurring due to exposure to a hazard ²¹
Risk Assessment	Establishing the context, identifying the risks, analysing and evaluating the risks and eliminating where possible or otherwise control the risks. To be most effective, this process should be subject to ongoing monitoring and review and be established in consultation with staff and adequately communicated to staff.
RLSSA	Royal Life Saving Society Australia
SA	South Australia
Safety issues	Considered to be those that pose a risk of injury (both serious and minor) to students or supervisors. This risk includes but is not limited to drowning
SOSE	Studies of Society and Environment
State and Territory Departments of Education	Used to refer to the Department of Education and Training in ACT, NSW, TAS and WA; the NT Department of Employment, Education and Training; the QLD Department of Education Training and the Arts; the SA Department of Education and Children’s Services and the VIC Department of Education and Early Childhood Development.
Strands	Groupings of understandings of a learning area’s content, processes and concepts ⁶⁵
Supervisor	Anyone who is not a student and is supervising aquatic activity undertaken during school hours or as part of school activities
Swim and Survive	A water safety and swimming program developed by the Royal Life Saving Society Australia to provide a set of skills for swimming strokes, personal

survival and basic rescue, and an understanding of how to be safe when in, on or around the water⁶⁸

TAS	Tasmania
VIC	Victoria
WA	Western Australia
WHO	World Health Organisation

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Appendices

Appendix 1: Education in Australia

The Australian school system begins with a preparatory year followed by 12 years of primary and secondary schooling⁴. School education is compulsory until the age of 15 except in Tasmania and South Australia, where it is compulsory to attend school until 16 years of age⁵. In the final year of schooling students can sit for their Higher School Certificate (HSC), or equivalent, which is recognised by all national tertiary education facilities as well as a number of international universities⁴.

In Australia, there are three categories of schools: public (run by the government), independent (run as separate entities often under a religious basis) and Catholic (run by the Catholic Church and administered by the Catholic Education Board). There are a total of 6,761 primary schools in Australia 75.0% are public schools, 6.3% are independent and 18.6% are Catholic schools.

Australia has a national curriculum framework and all schools provide subjects in the eight key learning areas: The Arts, English, Health and Physical Education (HAPE), Languages other than English, Mathematics, Science, Studies of Society & Environment (SOSE) and Technology⁶⁹. The national curriculum informs individual school curriculum and provides "...benchmarks for the reporting of student achievement..."(pg 1)⁶⁹.

Primary schooling in Australia is generally between 6 and 7 years, from year 1 to year 6 or year 1 to year 7⁵. During the primary school years of schooling a number of key skills are taught. Students learn to read and write and the key foundation learning takes place in all subject areas that will form the basis of their higher school education.

With respect to health and physical education, there are a number of key skills taught in the lower and upper primary bands (Bands A & B). In the lower primary years (Band A) students examine the difference between new and old, alive and dead and learn about parts of their bodies and their functions⁶⁵. Students in Band A learn about food, what they think it means to be healthy and identify in drawings and stories people and experiences that make them feel safe⁶⁵.

In Band B (upper primary level) students take part in wide ranging physical activities and are able to experiment with different movement patterns. Students learn about the different food groups and the effect these have on the body. Students examine individual and group interactions and the manner in which people engage with their community and their environment⁶⁵.

Physical Education

Physical education whilst one of the eight key learning areas in the national curriculum, may have more far reaching effects than merely education during the primary and high school levels. There is much literature that suggests that PE can potentially play an important role in enhancing public health by creating positive attitudes towards exercise in later life and "...by promoting health related fitness programs..."(pg 225)⁷⁰.

One of the factors contributing to Australian children's poor health profile has been identified as poor quality physical education (PE) programs in primary school⁶ and physical education is often deemed as a viable intervention program to reach children that are overweight and obese.

As outlined in the national curriculum, health and physical education teaches key skills in physical movement and activity are important learning tools for this age group. The national curriculum states that the lower primary years (Band A) are highly active and enthusiastic learners and as such, play and physical activity is an important vehicle for learning ⁶⁵.

Physical activity also has an effect on wider academic performance. Whilst it has been argued that physical education harms academic progress, research has shown that the impact of regular physical activity upon a child's general education is positive ⁶². Learning has been found to proceed more rapidly in students undertaking curricular physical activity.

Physical education has also been shown to accelerate "...psychomotor development and could provide a mechanism for accelerated learning of academic skills..." (pg 113) ⁶². Research has also found that physical education can also have a wider effect on a child's life. Physical activity has been linked to an improvement in a child's "...social, psychological and physical wellbeing..." (pg 20) ⁶.

Positive learning experiences

Positive learning experiences have been linked to healthy personality development ⁷¹. In the area of education, if a student has a positive learning experience for example, they are more likely to look favourably on that experience in later life and this may have an impact on their choices during adulthood. For example, a student that has a positive learning experience with respect to undertaking physical activity at school may be more likely to continue physical activity later in life and may even choose a career in such a field ⁶⁰. Positive learning experiences in HAPE is a concept that is linked to the idea that promoting healthy lifestyles in children will increase the likelihood of them maintaining healthy lifestyles in adulthood.

The concept of positive learning experiences is also related to the idea of lifelong learning which is discussed in academic literature. Lifelong learning is defined as "...as a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments..." (pg 22) ⁶⁷.

The concept of lifelong learning is being adopted in education, particularly in relation to health and physical education in Australia. HAPE is not only the most appropriate forum for encouraging the development of fundamental motor skills, but poor quality physical education programs in schools has been identified as one of the key factors contributing to the poor health profile of Australian children ⁶. Therefore ensuring positive learning experiences are enjoyed by students studying HAPE will have broader implications than merely enhancing children's education. Ensuring positive learning experiences around health and physical education may also address the issue of low participation rates in sport by girls in particular ⁶³.

Aquatic Activity at Schools

A wide range of aquatic activities are undertaken at schools in Australia and these activities and their associated safety issues have been examined within this paper. These aquatic activities can include learn to swim, recreational swimming, competitive swimming, rowing, canoeing, swimming carnivals and excursions to locations where water based activities are conducted among others.

The NWSP deems water safety to be a “...whole of life skill...” and as such water safety education is foundation learning (pg 15) ¹. The Plan states that the Australian Department of Education and Training and State or Territory Departments of Education (DET), in particular, have a key role to play in ensuring the designated water safety competencies are achieved by all Australian children ¹. Similarly, the VICSWIM survey identified that swimming (ie stroke development) and water safety are both “...integral to a rounded aquatic education program...”(pg 54) ⁶¹.

The NWSP also states that all Australian children must be given the opportunity and encouraged to achieve a minimum benchmark level of competence prior to leaving primary school as specified in the personal aquatic survival section of the National Swimming and Water Safety Framework (Figure 1) ¹.

Figure 1 National Water Safety Plan 2004-07 Water Safety Education Table ¹

SCHOOL LEVEL	COMPETENCY FRAMEWORK	MINIMUM DEMONSTRATION OF COMPETENCIES	SUCCESS RATES % of target population
(I) INFANT AND PRE-SCHOOL	Infant Aquatics section of the National Swimming and Water Safety Framework	Participation in the program	100%
(II) PRIMARY SCHOOL	Personal Aquatic Survival section of the National Swimming and Water Safety Framework • Competencies to be achieved by the completion of Primary School education	Equivalent to Swim and Survive Level 4 (and Surf Ed where available)	100%
		Level 5 Swim and Survive (and Surf Ed where available)	75%
		Level 6 Swim and Survive (and Surf Ed where available)	50%
(III) SECONDARY SCHOOL	Life Saving section of the National Water Safety Framework – including exposure to Basic First Aid & Resuscitation Training. • Competencies to be achieved by the completion of Year 10	Equivalent to RLSSA Bronze Star Dry Rescue, including Resuscitation (and SLSSA Surf Survival where available)	100%
		RLSSA Bronze Star (and SLSSA Surf Survival where available)	75%
		RLSSA or SLSSA Bronze Medallion	50%

Appendix 2: National Curriculum Overview

Australia has a national curriculum framework and all schools are to provide subjects in eight key learning areas: English, Mathematics, Studies of Society and Environment, Science, Arts, Languages other than English (LOTE), Technology and Personal Development, Health and Physical Education (PD/H/PE)⁶⁹. The national curriculum informs individual school curriculum and provides “...benchmarks for the reporting of student achievement...”(pg 1)⁶⁹ across different strands, that is “...groupings of understandings of a learning area’s content, processes and concepts...”(pg 1)⁶⁵ and bands, that is “...broad stages for developing knowledge, understanding and skills in a learning area...” (pg 1)⁶⁵.

This paper acknowledges that the national curriculum is in place as a guide for teaching and reporting of student achievement on a national scale. The national curriculum then informs State and Territory based curricula which in turn informs each school’s own curriculum. Research has shown there are definite differences between States and Territories; however, public schools in NSW for example, generally follow a similar curriculum.

Health and Physical Education (HAPE) is the main subject area under which aquatic activity and its associated learning outcomes will be reported. There are seven strands within the HAPE curriculum:

- Human development
- Human movement
- Physical activity & the community
- People & food
- Health of individuals & population
- Safety
- Human relations⁶⁹

A number of these sub areas within HAPE are relevant to aquatic activity such as safety and human movement and physical activity & the community.

In order to meet learning outcomes under the HAPE national curriculum, primary schools across Australia may undertake both practical water education (such as swimming lessons and stroke development in the water) and classroom based water safety. Undertaking classroom based water safety prior to the pool based education, or in tandem with it, may have a positive effect on the safety risks practical aquatic activity may present.

Appendix 3 includes an overview of the national curriculum strands and learning outcomes that relate to water safety and aquatic activity.

Appendix 3: Overview of the National Curriculum strands relevant to aquatic activity and water safety education at primary schools

Below is an overview of the national primary school curriculum strands and learning outcomes in key learning areas that are relevant to swimming and water safety education.

Level	Key Learning Area	Strand	Learning Outcomes
LEVEL 1	HAPE	Human Movement	1.3 Demonstrates simple movement patterns to show actions of the whole body.
			1.4 Combines movement with the use of objects by playing with and sharing equipment.
		Physical Activity and the Community	1.5 Communicates feelings during and after activity through words or actions
			1.6 Recognises and takes part in children's games and activities and describes places where children play.
		Health of Individuals and Populations	1.11 Explores and describes different environments, explaining feelings about them
	Safety	1.12 Identifies what makes a familiar environment safe.	
	Human Relations	1.14 Discusses ideas, feelings and questions about activities regarded as right or wrong, good or bad.	
	SOSE	Place and Space	1.5 Identifies places that are important to self and others.
		Natural and Social Systems	1.14 Identifies how rules influence daily life.
		Investigation, Communication and Participation	1.18 Differentiates between times when it is appropriate to act on personal choice or to follow established rules.
LEVEL 2	HAPE	Human Movement	2.3 Links a series of basic movement patterns to perform a simple movement sequence.
			2.4 Demonstrates basic motor skills with equipment in creative play and games.
	Health of Individuals and Populations	2.11 Explains how people are part of the natural environment and why people should care for the environment to promote and protect their health.	
		Safety	2.12 Explains and demonstrates options to improve personal safety and the safety of others.
	Human Relations	2.14 Explains why there are particular rules	

			about what is right or wrong, good or bad behaviour for different groups and situations.
	SOSE	Place and Space	2.5 Describes choices people make in their use of places.
			2.6 Identifies how people can cooperate to care for places in a community.
		Natural and Social Systems	2.14 Identifies reasons why groups and communities have rules.
LEVEL 3		HAPE	Human Movement
			3.4 Applies motor skills with equipment in skill drill activities and minor games.
	Safety	3.12 Demonstrates strategies that deal with unsafe or emergency situations.	
	Human Relations	3.14 Formulates codes of behaviour to enhance cooperation and assist interpersonal relations within a range of groups and contexts.	
	SOSE	Natural and Social Systems	3.14 Illustrates the linkages between rights and responsibilities for members of a community.
LEVEL 4	HAPE	Human Movement	4.3 Performs and repeats linked movement sequences that display consistency and control.
		Safety	4.12 Assesses options and consequences in responding to unsafe situations.
		Human Relations	4.14 Analyses the ethical dimensions of various rules and codes of behaviour.
	SOSE	Place and Space	4.5 Describes how people's beliefs and practices influence the ways they interact with places.
		Natural and Social Systems	4.14 Describes how rules and laws are made.
LEVEL 5	HAPE	Human Movement	5.3 Demonstrates co-ordinated actions of the body by performing and modifying movement sequences.
		Physical Activity and the Community	5.6 Examines the factors that influence community decisions to support and promote recreation, sporting and leisure facilities and activities.
		Safety	5.12 Evaluates behaviours that influence personal safety and that of others.
		Human Relations	5.14 Explains the personal and community factors involved in defining beliefs about what is right or wrong, good or bad.
LEVEL 6	HAPE	Human Movement	6.3 Plans and implements ways of improving physical performance by evaluating personal performance and that of others
		Safety	6.12 Evaluates community initiatives to promote safety.
		Human Relations	6.14 Analyses how different contexts and situations influence personal

SOSE	Investigation, Communication and Participation	6.16 Explains various ways of viewing an issue and the information associated with it. 6.17 Discuss the logic of and evidence for an argument or viewpoint. 6.18 Comes to an informed viewpoint and evidence presented by others.
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Information presented in this table drawn from the Swim and Survive Teachers Learning Outcomes from the RLSSA website ⁷².

Appendix 4: Water Safety Resources/Programs for Supervisors

Below is a table identifying the programs and resources in existence relevant to supervisors of aquatic activity at primary schools in Australia. Information presented in the table was drawn from the AWSC audit of water safety resources as part of the National Water Safety Plan and the RLSSA website.

Program/Resource	Organisation	Targeted users	Outcomes
Australasia-Oceania Swimming Professionals Convention	Australian Swimming Coaches and Teachers Association (ASCTA)	Aimed at teachers of swimming and water safety of all ages.	Provides education through lectures on various development topics for teachers of swimming and water safety.
AUSTSWIM teacher of swimming and water safety program	AUSTSWIM: The Australian Council for the teaching of swimming and water safety	Program will impact upon all ages but the program is for participants over 16 years of age.	Provides education through formal course work and practical industry based assessment.
Guidelines for Safe Pool Operation (GSPO)	Royal Life Saving Society Australia and Life Saving Victoria	All ages but specifically the commercial aquatic industry	The GSPO has developed and distributes safety standards for commercial swimming pools and includes standards for swimming teacher qualifications and supervision ratios.
RLSSA Bronze Rescue	Royal Life Saving Society Australia	For all ages but targets people aged 14 years and over.	An education program that gives participants the knowledge and skills to enable them to make decisions to enable themselves and others to survive aquatic emergencies.
Safe Surfing Australia	Surfing Australia Inc	All ages and particularly those interested in learning to surf	Provides education through a five level course that includes surf and beach environmental issues and dangers of the ocean such as changing conditions.
Swim TOUR: National Learn to Swim Seminar Tour	Swim Australia	Targets all ages but specifically teachers and managers of swimming and water	Provides education through a conference with international guest

Program/Resource	Organisation	Targeted users	Outcomes
		safety programs	speakers who present on topics associated with professional development for teachers of swimming and water safety and managers of swim schools.
Working with Culturally and Linguistically Diverse (CALD) communities across Australia	Royal Life Saving Society Australia	All ages and targets specific issues identified by each local community.	Provides programs and community awareness on water safety issues within the community and what steps can be taken to address these issues.
QLD – SwimWEST Conference	Swim Australia	Ages 15 to 55 plus years and teachers of swimming and water safety.	Experts present on topics of relevance to teachers and managers involved in swimming and water safety programs.
CALD work with SA Vietnamese community	Royal Life Saving Society Australia	Open to all ages but aimed at Vietnamese community members without first aid certificates	Community consultation highlighted important issues and strategies and resources were organised to address these issues.
Working with CALD communities in Tasmania	Royal Life Saving Society Australia	Open to all ages but targeting newly arrived refugees and immigrants.	Aimed to provide education to improve water safety skills and water safety knowledge.
The Surfing Victoria Indigenous Surfing Program	Surfing Victoria	Aimed at all ages and targeting the indigenous community.	Promotes surfing within indigenous communities and teaches surfing skills and water safety information to participants in the program.
Murdi Paaki Mobile Indigenous Training Program	Royal Life Saving NSW	All ages and participants within the Murdi Paaki region	Provides water safety and training programs to the local indigenous community.

Program/Resource	Organisation	Targeted users	Outcomes
Midwest/Geraldton WA- Outback Road Show 'Kaitlyn's Pool'	Aquarena, RLSSWA and DSR (Midwest)	All ages within remote communities	The program aimed to teach water safety in rural and remote areas using bodies of water such as rivers, creeks and dams.
Northern Territory Remote Pools Project	Royal Life Saving Society Australia	Provides support for pool managers in remote communities. In 2008 this project is operating in the remote communities of Areyonga, Daly River, Maningrida, Nguui, Ngukurr, Pirlangimpi, Santa Teresa, Wadeye and Yuendumu ⁷³	The project conducts safety and management audits, and provides telephone support, facilitates conferences and development activities for pool managers and provides support to all levels of government ⁷³
Muslim Aquatic Recreation Projects	Royal Life Saving Society Australia	Two projects have been undertaken with Muslim communities in South Western Sydney and in Hume in Melbourne ⁷⁴ .	These projects aim to increase the use of local aquatic facilities by the Muslim community and develop links between the Muslim and local communities. Provides community members with qualifications and skills and advocates for safe participation in, and enjoyment of, aquatic activity ⁷⁴ .

Information drawn from the Australian Water Safety Council's Audit of National Water Safety Programs 2006 conducted as part of the National Water Safety Plan 2004-07⁷⁵ and the RLSSA website⁷⁶.

Appendix 5: Water Safety Resources/Programs for Students

Below is a table identifying the programs and resources in existence relevant to students that undertake aquatic activity at primary schools in Australia. Information presented in the table was drawn from the AWSC audit of water safety resources as part of the National Water Safety Plan.

Program/Resource	Organisation	Targeted users	Outcomes
RLSSA Bronze Rescue	Royal Life Saving Society Australia	Affects all ages but targets people aged 14 years and over.	An education program that gives participants the knowledge and skills to enable them to make decisions to enable themselves and others to survive aquatic emergencies.
RLSSA Junior Lifeguard Club	Royal Life Saving Society Australia	Ages 8 to 15 years.	A program that educates and develops aquatic skills with an emphasis on lifesaving, swimming, community education, competition, lifesaving knowledge, leadership, teamwork and fitness.
Safe Surfing Australia	Surfing Australia Inc	All ages and particularly those interested in learning to surf	Provides education through a five level course that includes surf and beach environmental issues and dangers of the ocean such as changing conditions.
Surf Education	Surf Life Saving Australia	Aimed at all ages but specifically junior members of Surf Life Saving Australia	Delivers education from ages 8 to 14 and focuses on surf safety, survival and awareness and deals with surf dangers such as recognising currents and rips.

Program/Resource	Organisation	Targeted users	Outcomes
Swim and Survive	Royal Life Saving Society Australia	Ages 5 to 14 can participate and it targets all children within that age group	A national swimming and water safety program that aims to reduce the number of Australians drowning by ensuring people have a knowledge on how to be safe in, on or around water.
Telstra Beach to Bush Surf Safety Program	Surf Life Saving Australia	Targets ages 5 to 14 years and those school students in regional communities.	Provides school age children in regional Australia with an introduction to surf life saving including risk awareness and minimisation.
Working with Culturally and Linguistically Diverse (CALD) communities across Australia	Royal Life Saving Society Australia	All ages and targets specific issues identified by each local community.	Provides programs and community awareness on water safety issues within the community and what steps can be taken to address these issues.
NSW Country Energy Water Safety Program	Surf Life Saving NSW	Children aged 5 to 14 years and beach visitors.	Educates children on the essentials of water safety and techniques of one person rescue with equipment.
Working with CALD communities in Tasmania	Royal Life Saving Society Australia	Open to all ages but targeting newly arrived refugees and immigrants.	Aimed to provide education to improve water safety skills and water safety knowledge.
VIC – Boating Safety for Kids Program	Life Saving Victoria	Aimed at ages 5 to 14 years.	Aims to educate kids on safety equipment, the dangers of different waterways, emergency response messages and the use of Personal Flotation Devices (PFDs) amongst other things.
VIC – Open Water Learning Experience	Life Saving Victoria	Aimed at ages 5 to 14 years of age.	A program that provides education on practical life

Program/Resource	Organisation	Targeted users	Outcomes
			saving skills such as life jackets, rope rescue and resuscitation skills.
Victorian Schools Pool Life Saving TELEGAMES 2005	Life Saving Victoria	Aimed at ages 5 to 14 years of age.	Provides a pathway to the Junior Lifeguard Club through competition.
The Surfing Victoria Indigenous Surfing Program	Surfing Victoria	Aimed at all ages and targeting the indigenous community.	Promotes surfing within indigenous communities and teaches surfing skills and water safety information to participants in the program.
Murdi Paaki Mobile Indigenous Training Program	Royal Life Saving NSW	All ages and participants within the Murdi Paaki region of NSW.	Provides water safety and training programs to the local indigenous community.
Midwest/Geraldton WA- Outback Road Show 'Kaitlyn's Pool'	Aquarena, RLSSWA and DSR (Midwest)	All ages within remote communities	The program aimed to teach water safety in rural and remote areas using bodies of water such as rivers, creeks and dams.

Information drawn from the Australian Water Safety Council's Audit of National Water Safety Programs 2006 conducted as part of the National Water Safety Plan 2004-07 ⁷⁵.

Appendix 6: Water Safety Resources

There are a number of water safety resources including information and programs that are available for both teachers and supervisors of aquatic activity, as well as students, to access. Below an alphabetical list of a selection of key resources are identified and summarised.

Aquapak: An Instructors Guide to Swim and Survive

The Aquapak is a practical planning resource that may be used as a basis for "...developing a unique program in water safety, survival and swimming to suit the requirements of each student..." (pg 4)⁷⁷ and assists in the delivery of the Swim and Survive program. The Aquapak is an extremely useful resource for teachers as it links achievements under the Swim and Survive program with the outcomes for students as outlined in the National Health and Physical Education curriculum⁷⁷.

Linked to water safety education is the Aquacode; three key water safety messages that are especially important for the primary school age group, the focus of this issues paper. These messages are also linked to the Swim and Survive program. These three messages are:

1. Go Together
2. Stay Afloat and Wave
3. Reach to Rescue (pg 156)⁷⁷.

Australian Water Safety Council Audit

The Australian Water Safety Council (AWSC) as part of the National Water Safety Plan 2004-07 undertook an audit to identify the water safety programs and, services and resources available in Australia⁷⁵. A list of resources identified by the AWSC audit relevant to both supervisors of aquatic activity and students can be found in Appendix 2 and 3.

Bronze Medallion

The Bronze Medallion and Rescue award programs teach an understanding of the lifesaving principles that are embodied within water safety education. The Bronze Medallion is the central component of the Bronze Program and has been in existence for over 100 years.

The skills taught in the Bronze and Rescue programs includes: judgement, knowledge, skills and fitness. There are six awards within the Bronze and Rescue strands: Dry rescue, wade rescue, accompanied rescue, bronze star, bronze medallion and bronze cross⁷⁸.

Bronzepak: An Instructors Guide to the Bronze Awards

The Bronzepak includes materials to support the Bronze awards. These materials include a waterproof assessment guide and Bronze Medallion DVD.

Guidelines for Safe Pool Operation (GSPO)

The RLSSA GSPO is also a useful resource for swim teachers. It provides best practice guidelines for aquatic programs, teacher to student supervision ratios and instruction on safe teaching techniques for diving (GSPO:PR 4)²². It is a valuable practical resource having been established in consultation with industry and is subject to ongoing review through a process of formal evaluation²².

Junior Lifeguard Club (JLC)

The Junior Lifeguard Club (JLC) provides participants with opportunities across a range of programs such as Swim and Survive and Bronze Rescue⁷⁹.

The JLC offers a chance for children to go beyond swimming lessons and is aimed at quick learners and children between levels or programs. Participants develop and improve their swimming and other aquatic skills, with a focus on: Swimming and lifesaving skills, fitness, lifesaving knowledge and education, community service, leadership and teamwork and lifesaving competition ⁷⁹.

Swim and Survive Program

The Swim and Survive program aimed at 5 to 14 year olds is a “...water safety and swimming program developed by the Royal Life Saving Society Australia to provide a set of skills for swimming strokes, personal survival and basic rescue, and an understanding of how to be safe when in, on or around the water...” (pg 8) ⁶⁸.

The Swim and Survive program began in 1982 and since its inception over 15 million children have participated and since 1975 there has been a 75% reduction in the rate of drowning deaths among children aged 5-14 years ⁶⁸. Approximately 550,000 children participate in the Swim and Survive program each year which represents around 25% of children aged 5-14 in Australia ⁶⁸. The Swim and Survive Program develops: Swimming technique, water safety knowledge, water confidence, survival skills and endurance ⁷⁹.

Within the Swim and Survive program there are a number of additional resources that are available to teachers and supervisors of aquatic activity. These include: the Aquapak, waterproof assessment guide, swim and survive DVD, Certificates, promotional materials and Aqua Quiz ⁸⁰.

Swimming and Life Saving: Water Safety for all Australians 5th edition Version 2

The Swimming and Lifesaving: Water Safety for all Australians 5th edition is produced by RLSSA as an easy to use manual which includes up to date and informative text, images and diagrams about water safety and life saving techniques. Information is included on such topics as: water safety, the Swim and Survive Program, swimming and lifesaving strokes, life saving skills, rescue techniques, resuscitation and emergency care ⁷⁹.