HEALTH AND PHYSICAL EDUCATION

Level

F	I	2	**3**	4	5	6	B6

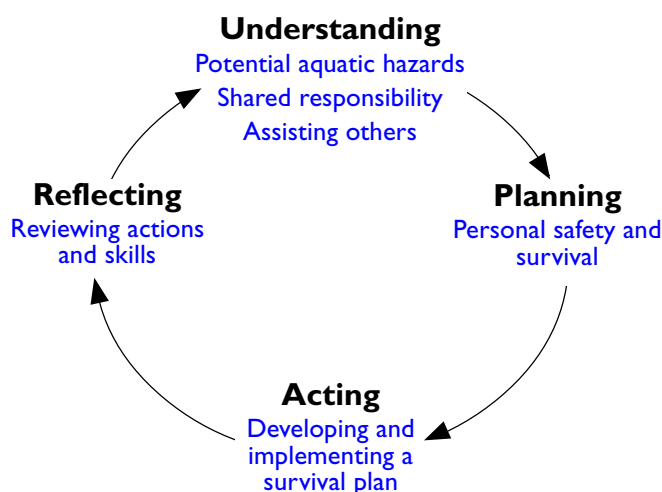# Water safety and survival

Strands
Promoting the Health of Individuals and Communities
Developing Concepts and Skills for Physical Activity
Enhancing Personal Development

Purpose

Students identify potentially hazardous situations in aquatic environments and demonstrate actions to respond to unsafe and emergency situations. They practise and develop the movement skills and sequences required to demonstrate personal survival skills and efficient stroke techniques in a range of aquatic situations. Students make decisions about and demonstrate actions to ensure the safety of themselves and others in these environments and demonstrate communication and cooperation skills as they collaborate with others to ensure survival.

Overview of activities

Activities in this module are based on a learner-centred approach with an emphasis on decision making and problem solving. As the following diagram shows, activities are sequenced in **understanding**, **planning**, **acting** and **reflecting** phases.

Understanding
Potential aquatic hazards
Shared responsibility
Assisting others

Planning
Personal safety and
survival

Acting
Developing and
implementing a
survival plan

Reflecting
Reviewing actions
and skills

Core learning outcomes

This module focuses on the following core learning outcomes from the Years 1–10 Health and Physical Education Syllabus:

Promoting the Health of Individuals and Communities

3.3 Students identify potentially hazardous situations and demonstrate actions to respond to unsafe and emergency situations.

Developing Concepts and Skills for Physical Activity

3.1 Students perform movement skills and sequences to meet the requirements of different physical activities and tasks.

Enhancing Personal Development

3.4 Students demonstrate communication, cooperation and decision-making skills to collaborate in social, team or group situations.

Core content

This module incorporates the following core content from the syllabus:

Promoting the Health of Individuals and Communities

- behaviours that promote personal and group safety related to aquatic environments;
- safe, unsafe, risky and challenging behaviours in physical activities in aquatic environments;

Developing Concepts and Skills for Physical Activity

- specialised skills for swimming and water safety;

Enhancing Personal Development

- interpersonal skills of communication, cooperation, decision making and problem solving.

Assessment strategy

The following are examples of assessment tasks that provide opportunities for students to demonstrate the core learning outcomes identified in this module.

Promoting the Health of Individuals and Communities 3.3

- **Students identify the potentially hazardous situations associated with a range of aquatic environments. They explain how they would respond to these situations, identifying the knowledge and skills they would require.**
  - Can the student identify potentially hazardous situations related to different aquatic environments?
  - Can the student suggest appropriate responses to these situations?
  - Can the student identify the skills needed to demonstrate these responses?
  - Can the student explain emergency procedures related to familiar aquatic environments — for example, the school/home pool?

Developing Concepts and Skills for Physical Activity 3.1

- **Students demonstrate skills and sequences to respond to unsafe and emergency situations in aquatic environments.**
  - Can the student demonstrate the following skills?

    float with a flotation aid for one minute;
    scull head first on the back;
    scull feet first on the back;
    swim slowly keeping the arms below the surface of the water;
    swim 50 metres using recognised strokes;
    perform a step-in entry;
    perform a compact jump;
    use a rigid object to pull a partner to safety;
    throw a flotation aid to a partner in the water.
  - Can the student combine survival swimming skills in a sequence in response to a given situation?

Enhancing Personal Development 3.4

- **Students demonstrate communication, cooperation, decision-making and problem-solving skills in situations where they take action to ensure the survival of themselves and others in aquatic environments.**
  - Does the student provide clear instructions and reassurance when assisting a partner?
  - Does the student cooperate to ensure the safety of others in partner and group activities?
  - Does the student contribute to problem solving and decision making in partner and group activities?
  - Does the student accept different roles in partner and group activities?

Background information

Water safety and survival

Students in the middle primary years are becoming more adventurous when they participate in water-based recreation activities, whether it be in the surf, pools, rivers or dams. Students need to have an understanding of water safety and survival and be able to demonstrate safe behaviours and personal survival skills.

This module has links with the Royal Life Saving Society Swim and Survive Awards (levels 3 and 4); however, not all aspects of the awards are necessarily reflected in this module. Students who are progressing towards Swim and Survive Awards at other levels may already have acquired a number of the skills developed in this module.

Where students are not proficient in the basic strokes of freestyle and breaststroke, time will need to be spent improving these in conjunction with this module.

All activities should be developed to the point where students are able to perform them confidently and competently wearing swimwear and clothing. The 'buddy' system, where a pair of students is responsible for monitoring each other's safety, is traditionally used in aquatic activities. This system can

also be used to allow students to act as tutors in assisting their partners to improve performance. This will be important in partner and group work if students are to experience situations as close as possible to real life within the bounds of safe behaviour.

Terminology

Activities in this module involve use of the following language in the context of Health and Physical Education:

aquatic	emergency	sculling
buoyant	hazardous	self-preservation
collaborate	patrolled	submerged
communicate	personal flotation device (PFD)	survival skills
compact jump	procedure	tides
cooperate	rips	vigilance
currents		waves

School authority policies

Teachers need to be aware of and observe school authority policies that may be relevant to this module.

Safety policies are of particular relevance in 'Water safety and survival'. Some safety issues that teachers should consider are:

- having a 'spotter' present in addition to the teacher to observe students in the water;
- establishing safety procedures as a priority before arriving at the pool, and repeating and rehearsing them once students enter the pool area;
- ensuring safe behaviour outside and around the pool — for example, no running or pushing;
- defining boundaries for the lesson — for example, from this end of the pool to the steps, or three lanes from the edge;
- using a 'freeze' command or a whistle code to indicate when immediate attention is required;
- establishing emergency procedures that are well understood by all staff and students involved in the swimming program;
- consulting regularly with pool staff about access, first-aid facilities, emergency procedures and evacuation routes.

The school's sun safety policy should also be considered.

Teachers should seek information from parents/carers and students about any factors that might affect a student's capacity to participate safely in swimming activities.

Social justice principles

This module provides opportunities for students to increase their understanding and appreciation of supportive environments and diversity. It includes activities that encourage students to:

- work cooperatively with others in a range of activities;
- identify the contribution of individuals to the group's work;
- develop an understanding about the responsibilities of the community to ensure the wellbeing and safety of individuals and groups, and the reciprocal responsibility of individuals and groups to the community.

Support materials and references

Meaney, P. H. (ed.) 1994, *Teaching Swimming and Water Safety*, The Australian Council for the Teaching of Swimming and Water Safety (Austswim), Canberra.

Rhodes, L. (ed.) 1993, *Successful Strokes*, Australian Swimming Inc., Canberra.

The Royal Life Saving Society Australia 1995, *Swimming and Lifesaving*, 3rd edn, Mosby Lifeline, Sydney.

The Royal Life Saving Society Australia 1996, *Aquapack*, 2nd edn, Mosby Lifeline, Sydney.

The Royal Life Saving Society Australia, *The Royal Life Saving Society Australia*. Available URL: http://www.rlssa.org.au/ (accessed 15 April 1999).

Surf Life Saving Queensland, *Surf Life Saving Queensland*. Available URL: http://www.lifesaving.org.au/education/safety/surfsafe.htm (accessed 15 April 1999).

Organisations

Austswim — Queensland Branch
    PO Box 301
    Albion, Q 4010
    Tel: (07) 3260 4140
    Fax: (07) 3260 4130

Queensland Swimming Association Inc.
    PO Box 2140
    Fortitude Valley, Q 4006
    Tel: (07) 3252 4845
    Fax: (07) 3252 8374

Royal Life Saving Society of Queensland
    PO Box 1093
    Capalaba DC, Q 4157
    Tel: (07) 3828 2823
    Fax: (07) 3823 2423

Surf Life Saving Queensland
    PO Box 3747
    South Brisbane, Q 4101
    Tel: (07) 3846 8000
    Fax: (07) 3846 8008

WATER SAFETY AND SURVIVAL • MIDDLE PRIMARY

Activities

Materials

This module requires students to use flotation aids. Any buoyant material will be suitable. Both rigid and non-rigid reaching aids are also required for performing rescues. Rigid aids include sticks, umbrellas, paddles; non-rigid aids include towels, ropes and clothing.

Students will need shorts and a T-shirt for a clothed swim.

Understanding

POTENTIAL AQUATIC HAZARDS	Developing an understanding of the need to be proficient in water safety and personal survival skills

▶ Students make a list of the water activities they enjoy and the various places where these may occur — for example, surf, creek, pool, dam, water theme park.

R Resource Sheet 1

▶ Students draw or locate a map of the local area indicating which areas or places are available for water activities. They discuss the potential dangers associated with each of these locations. Locations could include a council/community pool, rivers, beaches, lakes, water slide, home pool (see Resource Sheet 1, 'Hazards in water environments').

Focus questions could include:
- **Are there facilities in the local area suitable for the water activities that you suggested previously?**
- **What are the dangers associated with each of these locations?**
- **Which people are most at risk in these places? Why?**

▶ In groups, students research where the majority of drownings occur in their state or local community and consider the implications of this information in terms of personal and community safety requirements. They also investigate the age-groups involved in aquatic incidents. Students negotiate roles within the group, such as who is going to record and who will present findings. Each group prepares a presentation to report their findings.

Focus questions could include:
- **Where do most people drown?**
- **What dangers exist in natural water environments?**
- **What dangers exist in built water environments?**
- **What skills would be needed to survive in these natural water environments — for example, how long would you need to be able to float or swim to survive?**

▶ Students experience the effect of a strong current (where possible) by creating a whirlpool in a pool and trying to change direction against the current. The whirlpool is created by a group moving rapidly in a circular path in the shallow end of the pool. As the whirlpool develops, students may find it difficult to maintain their footing. They could hold hands with a partner when doing this activity. Students who lack confidence in the water should hold onto the side of the pool. To move out of the whirlpool, students should move diagonally across the 'current' towards the edge of the pool.

▶ Students experience the effect of loss of sight/disorientation caused by murky water or darkness by swimming with their eyes closed while trying to find a partner or object. They follow instructions given by the teacher or a partner.

Focus questions could include:

- How could you search for something under water when the water is murky?
- How could you locate someone in the water if you were unable to see the person — for example, in darkness or in choppy water?
- Would it be easier to find something or someone in the water by yourself or with a group of people? Why?

Teaching considerations

Encourage students to give precise directions to their partners during this activity.

Student work in the understanding phase provides opportunities for assessment linked to English (writing and speaking) — for example, describing the feeling of having no vision in the water; describing how they would feel if they really lost their eyesight or were in flood waters at night; or describing what they would try to do if they were in such a situation. Reflective written pieces could also be developed about the feeling of being caught in a current and trying to fight it.

SHARED RESPONSIBILITY	**Developing an understanding of safety as a shared responsibility**

▶ Students work in small groups to identify and discuss rules related to a range of aquatic environments — for example, at a pool; at a water theme park; in a river, lake or dam; or at the beach. They consider who makes the rules, who enforces them and why such rules are necessary. Students also discuss who has responsibility for safety when there is nobody to enforce rules. Each group presents the results of their discussions.

▶ Students identify which of the rules that exist for managed aquatic environments, such as water theme parks and pools, could be transferred to other aquatic environments.

▶ Students discuss who has ultimate responsibility for their personal safety in the water, their family's safety at an aquatic environment, students' safety at a school pool, and the safety of the community at the beach. Working in groups, they list the advantages and disadvantages of being responsible for their own personal safety and having a parent/carer, teacher or lifesaver take responsibility for their personal safety.

Teaching consideration

Students should understand that they have responsibility not only for their own safety but also for the safety of other members of their group. They should adopt an attitude of 'looking out for each other'.

ASSISTING OTHERS	Developing an understanding that self-preservation is of prime importance when assisting others

▶   Students identify situations where a person may experience difficulty in the water and require assistance. They develop the understanding that self-preservation is the most important factor in any rescue and discuss ways in which they could assist a person in difficulty in the water without actually entering the water — for example, reach-and-throw rescues. Refer to *Swimming and Lifesaving* (The Royal Life Saving Society Australia 1995), pp. 63–80 for more details.

Planning

PERSONAL SAFETY AND SURVIVAL	Learning and performing movement skills and sequences necessary for personal safety and survival in common aquatic situations

▶   Students explore the survival skill of **floating** and the principles of buoyancy by exploring ways of floating with their faces clear of the water.

Focus questions could include:

- **What is the role of the lungs in buoyancy?**
- **Which people have the most difficulty in floating? Why?**
- **What are the advantages of being able to float with your face clear of the water?**

Teaching considerations

Survival floating is used when it is necessary to conserve energy. The swimmer should be relaxed. Floating requires very little movement other than changing position occasionally to avoid cramps if it is necessary to remain afloat for a long time.

Swimmers may lie in a horizontal, angled or in a vertical position with the face clear of the water when floating. The hips should be close to the surface.

Keeping the face clear of the water allows for uninterrupted breathing.

Some students will experience difficulty floating in fresh water without an aid; salt water provides greater buoyancy.

▶   Students identify a range of objects found in various environments which can be used as flotation aids. They discuss various ways of holding the differently shaped aids they identify. Examples of flotation aids found in various environments include plastic containers and balls at a picnic venue; and kickboards, balls, personal flotation devices (PFD) and rescue buoys at a pool.
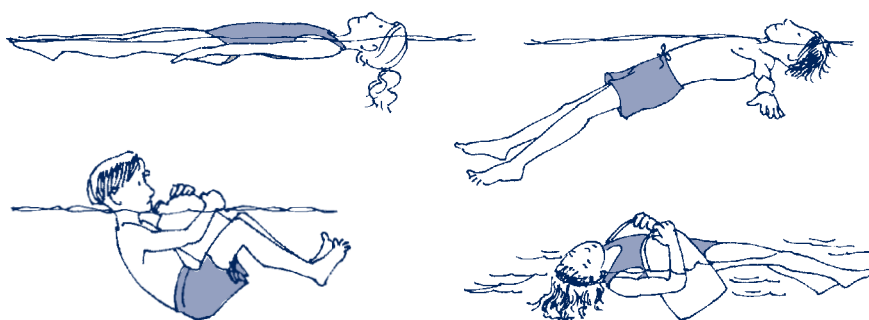
▶ Students explore the main features of staying afloat and moving around in a restricted area using a flotation aid which they have provided. As part of the exploration, they hold the aid in different positions and try various floating positions. Students exchange aids with others in the group and gauge the effectiveness of each item.

Focus questions could include:
- **What is the best way to float/swim using the flotation aid?**
- **Which of the objects worked best?**
- **Why was this object a good flotation aid?**
- **Can you create buoyancy aids from other objects or clothing?**
- **How successful are they?**

▶ Students swim for one minute in a restricted area using a flotation aid. They should move slowly to conserve energy and change the position of the flotation aid on a signal from the teacher.

▶ In groups of four or five, students explore group survival with flotation aids. Each group plans cooperatively how they can share two or three flotation aids to support all members of the group. They then enter the water with the aids to implement their plan. As they float, they should offer words of encouragement and reassurance to each other. After the activity, students discuss which plans worked most effectively for their group.

Teaching considerations

Ensure students observe safety rules at all times.

Encourage students to explore a number of options for using the aids — for example, under an arm, on the chest, on the stomach.

▶ Students explore the principles of propulsion required in **survival sculling** and practise sculling head first and feet first on their backs. They also explore the use of the sculling action to rotate the body in a tucked position keeping the head out of the water. Refer to *Swimming and Lifesaving*, pp. 29–34 for more details.

Focus questions could include:
- **What hand movements need to be made in the water to propel your body feet first while floating on your back?**
- **What would you need to do to propel your body head first using a similar arm action?**
- **Can you move yourself sideways using a similar arm action?**
- **When would you perform this action?**

▶ Students practise swimming strokes used in **survival swimming** — that is, freestyle, breaststroke, sidestroke, survival sculling, survival backstroke. For further information on these strokes, refer to *Swimming and Lifesaving*, pp. 35–53. For students to develop proficiency, practice of these strokes should be ongoing.

▶ Students demonstrate swimming strokes that best meet the following criteria and identify situations in which they would use the strokes. They also provide reasons why they would use a particular stroke in a given situation. Examples of criteria include:

- a stroke which allows the swimmer to move quickly and see where he or she is going (freestyle);
- a stroke where the arms remain under water all the time (breaststroke or sidestroke);
- a stroke where the arms come out of the water (backstroke or freestyle);
- a stroke which allows the swimmer to look for someone/something on the surface (freestyle with head up or breaststroke);
- a stroke which allows the swimmer to look for someone/something under the surface (breaststroke);
- a stroke where breathing is not interrupted (sidestroke or survival backstroke);
- a stroke which allows the swimmer to signal for help while continuing to move (survival backstroke).

Focus questions could include:
- **What are the advantages and disadvantages of the different strokes?**
- **How can you combine the strokes that you have suggested into a sequence?**
- **Why and when might you need to combine different strokes?**

▶ Students practise swimming slowly keeping their arms below the surface of the water and changing their stroke at regular intervals. They gradually increase the duration of the swim until they are able to keep going for three minutes changing strokes after each minute.

▶ Students dress in swimwear, shorts and a T-shirt to practise survival sculling, swimming and floating skills demonstrated in earlier activities. They also demonstrate combinations of these that would be used in the various situations.

Focus questions could include:
- **How does wearing clothes while swimming make a difference to your performance?**
- **Are you more or less buoyant when wearing clothes?**
- **Are there any situations where wearing clothes would be an advantage?**
- **Are there articles of clothing that you would discard/retain in certain situations?**

▶ Students identify different ways of entering the water and compile a list of **entries** appropriate for various situations. Situations could include:
- where the depth of water is unknown;
- when the water is very murky or muddy;
- where there might be hidden snags and obstacles;
- where the water is clear and deep;
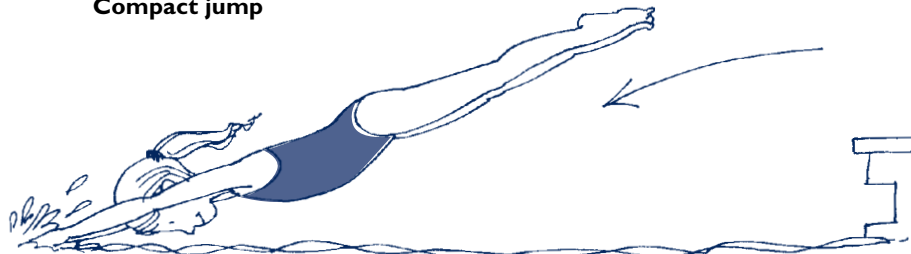- where it is necessary to enter the water of unknown depth from a height.

▶   Students practise the following water entries:
- slide in;
- walk in;
- step in;
- compact jump;
- stride entry;
- shallow dive.

**Stride entry**

Compact jump

Shallow dive

Teaching considerations

For further details of these entries, consult the resources listed in 'Support materials and references', p. 5.

▶   Students work with a partner to practise a **reach rescue** using both rigid and non-rigid rescue aids. Rigid aids include sticks, umbrellas and paddles. Non-rigid aids include towels, ropes and clothing. The student performing the rescue lies chest down on the ground in a stable, anchored position and reaches out with an aid to the student in the water before pulling him or her to safety. The student performing the rescue should communicate with his or her partner during the rescue offering reassurance and advice. The student in the water should be close to the edge of the water. Refer to *Swimming and Lifesaving*, pp. 75–79 for further information.

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▶   Students practise **throwing a flotation aid** into a hoop or other floating target at a distance of 5 metres before attempting to throw one to a partner in the water. To simulate a rescue situation, the student in the water pretends to be experiencing difficulty. His or her partner on the shore or the side of the pool chooses a suitable rescue aid and tells the student in the water how to use it before throwing it. The student performing the rescue should communicate with his or her partner during the rescue offering reassurance and advice. Refer to *Swimming and Lifesaving*, pp. 75–79 for further information.
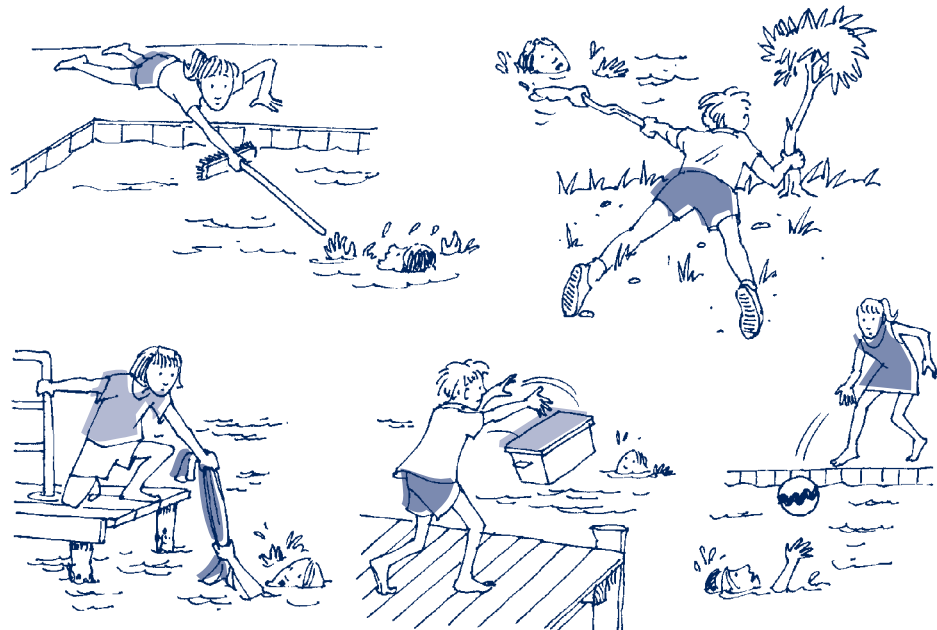
Resource Sheet 2

▶   Students discuss the safety and survival strategies described as the **Aquacode** (see Resource Sheet 2).

Acting

DEVELOPING AND IMPLEMENTING A SURVIVAL PLAN	**Applying the skills and knowledge gained through the planning phase to devise and implement an action plan for own survival and that of a companion**

▶   Students consider a number of scenarios and devise an action plan that ensures self-preservation when involved in a water safety incident. Students will need to explore the decisions to be made, the environmental factors to be considered, and the skills required in the scenario. Examples of scenarios include the following:

• You are on your bodyboard in the surf and start to drift out to sea in a rip.

• During a storm you are caught under a small boat that has capsized in a bay at a distance from shore that is too far for you to swim.

• While swimming in a river on a picnic you are carried downstream by a strong current.

• You are swimming in deep water and suffer from a severe cramp in one leg.

▶ Students then act out one of the scenarios to test their proposals. In a journal, they record their reflections on the decisions they made and the actions they implemented.

▶ Students cooperate with a partner to develop and implement a plan for their own survival and that of a companion in response to a given scenario. Examples of scenarios include:

- While at a picnic, you and a friend are paddling a canoe which overturns in the middle of the river. Your friend is not a very strong swimmer.
- You and a friend are dumped by a large wave while riding your bodyboards in the surf. You lose your board and the two of you realise that you have been washed out of your depth and away from the flagged surfing area.
- While fishing from the rocks with a friend, you lose your footing and slip into very deep, cold water. You are unable to get a handhold to pull yourself out. Your friend wants to help you but does not know what to do as he or she is afraid of the water and unable to swim.
- While walking along a path near a river, you see a young child slip into the water. There are no adults in sight.

▶ Students present their group research project from the understanding phase on the incidence of drownings. They explain how their group made decisions about the roles members were to undertake and how they cooperated to achieve the task.

Reflecting

REVIEWING ACTIONS AND SKILLS	Reviewing what has been learned and identifying further skills and knowledge needed to ensure own and others' safety in aquatic environments

▶ Students discuss the decisions they made and the action plan implemented in the scenario of the previous activity.

Focus questions could include:
- How effective were the decisions you made and the action plan you implemented?
- What aspects of the decisions or plan did not work well?
- What other skills could have been used?

▶ Students assess their ability to survive in the water and their ability to assist someone in difficulty.

Focus questions could include:
- Do you have the skills to survive in the water?
- What additional skills do you need to learn or develop?
- What aspects of the skills that you have learnt must be improved if you are to survive a dangerous situation in the water in real life?
- What are the implications for your own and others' safe behaviours in water environments?

Hazards in water environments

R1

Rivers, creeks and waterholes are unpatrolled and may contain currents, crumbling banks, uneven and unsafe riverbeds, and submerged obstacles.

Lakes and dams are unpatrolled and may contain river entry points with strong currents, cold water and waves.

Open water environments are often unpatrolled and may contain waves, currents, tidal currents and rips.
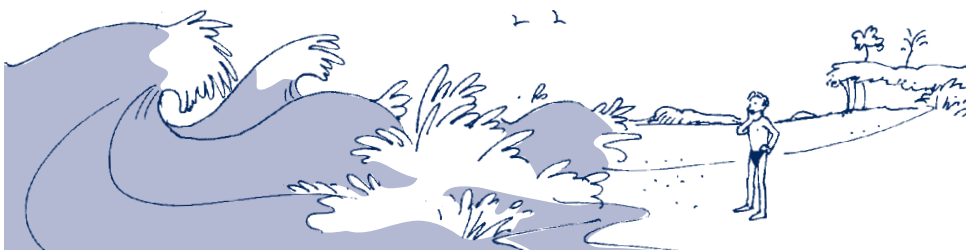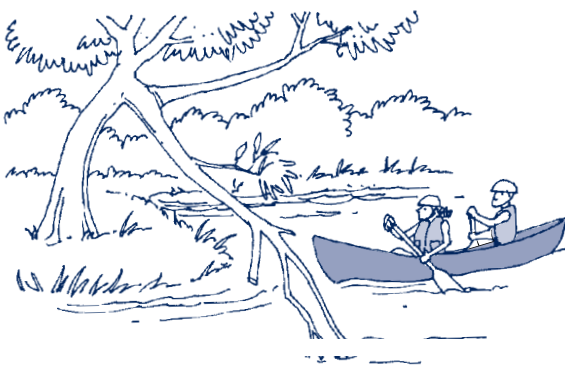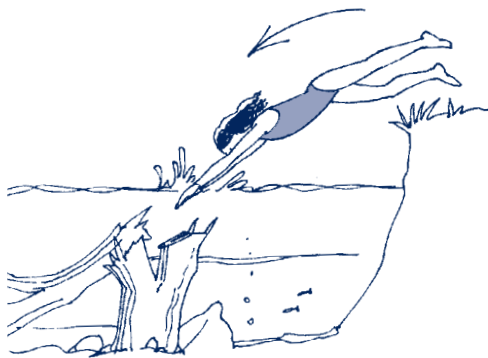
Source: Adapted from The Royal Life Saving Society Australia 1995, *Swimming and Lifesaving*, 3rd edn, Mosby Lifeline, Sydney, pp. 12–15.

The Aquacode

The Aquacode involves three rules. They are:

1. *Go together.*
   When playing in, on or near water, always make sure someone is with you.

2. *Stay afloat and wave.*
   If in trouble in the water, try to relax, roll on your back, hold on to something if available, and wave one arm with the fist clenched to attract attention.

3. *Reach to rescue.*
   If someone needs help, do not get into the water. Lie down and reach out with a stick or another rigid object, or throw a rope.

Source: The Royal Life Saving Society Australia 1995, *Swimming and Lifesaving*, 3rd edn, Mosby Lifeline, Sydney, p. 10.

Acknowledgments

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The Royal Life Saving Society Australia, Sydney, for material from *Swimming and Lifesaving*, 3rd edn.