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SunSmart at school

Strand

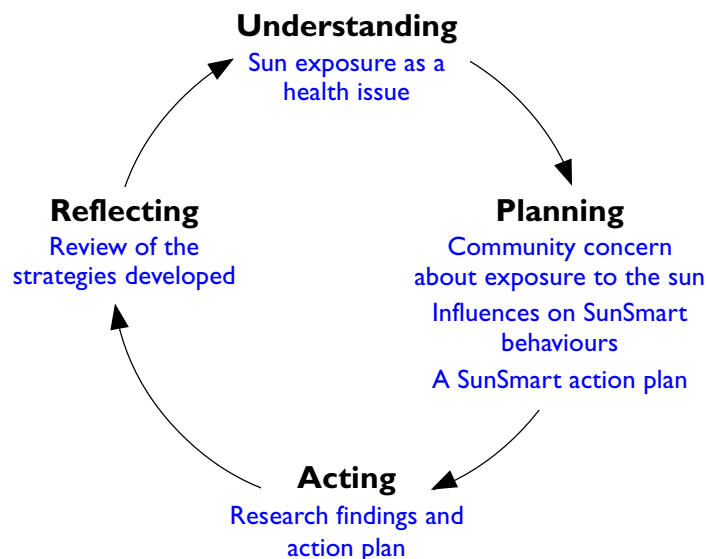
Promoting the Health of Individuals and Communities

Purpose

Students investigate their own and others' SunSmart behaviour and a range of social, biological and environmental factors that influence those behaviours. They examine personal and school strategies that promote sun safety. Students propose ways of promoting sun safety to young people in the current school setting.

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.



Core learning outcomes

Promoting the Health of Individuals and Communities

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

- 4.1 Students recommend actions they can take to promote their health in response to social, biological or environmental factors.
- 4.5 Students identify aspects of their social and physical environments that enhance, or pose threats to, their health and plan strategies for achieving healthy environments for themselves and others.

Core content

Promoting the Health of Individuals and Communities

This module incorporates the following core content from the syllabus:

- individual and group actions and behaviours as factors that influence health;
- behaviours that promote personal and group safety related to the sun;
- the role of individuals and communities, and the impact of rules, laws and policies in the creation and maintenance of environments that promote and protect health.

Assessment strategy

Promoting the Health of Individuals and Communities 4.1, 4.5

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

- **Students present an action plan that aims to get a group within the school to exhibit specific SunSmart behaviours. They describe actions that they could take to make the target group aware of the dangers of sun exposure, and how to minimise these dangers. They say what these actions are intended to achieve and explain their reasons for choosing these actions. They outline how the action plan takes account of social, biological or environmental factors that influence SunSmart behaviours.**
 - Does the student identify the SunSmart and non-SunSmart behaviours of the target group?
 - Does the student clearly articulate the recommended actions?
 - Can the proposed actions reduce the health risk from sun exposure?
 - Do the recommended actions take account of the effect peer pressure on SunSmart behaviours?
 - Do the recommended actions take account of the effect of heredity on SunSmart behaviours?
 - Do the recommended actions suggest changes to the physical environment that will provide increased protection from the sun?

- Does the student identify and suggest ways of overcoming barriers against behaviour change?
- Does the student suggest suitable incentives to promote behaviour change?
- Can the strategy be implemented at school?

Background information

Sun safety

Exposure to ultraviolet radiation (UVR), such as that emitted by the sun, damages the skin. Unfortunately, the damage is cumulative. It can take various forms, including premature ageing, sunspots and blemishes, carcinomas and melanomas. These signs of damage may not be visible for many years.

Queensland has the highest rate of skin cancer in the world (Queensland Cancer Fund 1997). Two out of every three people living in this State will develop some form of skin cancer during their lifetime.

Reducing exposure to UVR can prevent such damage to the skin. Current research indicates that at least 60 per cent of all melanomas diagnosed could have been prevented if the victims had reduced their exposure to UVR in the first 18 years of their lives.

This module examines and develops strategies for reducing students' exposure to UVR during the school day.

This module has been developed with the assistance of the Queensland Cancer Fund publication *Working towards a SunSmart Queensland* (1997). This publication provides valuable information on developing and implementing a successful SunSmart policy in various settings. Many of the checklists and questionnaires included in this text could be adapted for student research.

Terminology

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

biological factors	skin cancer
environmental factors	social factors
melanoma	target group
policy	ultraviolet radiation

School authority policies

Teachers need to be aware of and observe school authority policies, particularly those relating to sun safety, that may be relevant to this module.

Social justice principles

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

- develop the knowledge, skills, attitudes and values they need to promote and achieve the best possible health in relation to sun exposure and sun protection at school.

Students with disabilities or learning difficulties may require some activities to be modified to optimise both their participation and their ability to demonstrate the outcomes. Teachers should consult with parents/carers and specialist support staff to determine whether modification is necessary.

Support materials and references

Bureau of Meteorology, Department of Environment and Heritage, Australia. Available URL: <http://www.bom.gov.au/> (accessed November 2000). (This website provides data and other information about UVR levels and UVR forecasts.)

Queensland Cancer Fund 1996, *Skin Cancer and Teenagers Project (SCAT): A Sun Safety Resource*, Brisbane.

Queensland Cancer Fund 1997, *Working towards a SunSmart Queensland: A Policy Guide for Organisations*, Brisbane.

Queensland Cancer Fund 1998, *SunSmart Teaching Resource: Years 1–7*, Brisbane.

Queensland Cancer Fund. Available URL: <http://www.qldcancer.com.au/> (accessed November 2000).

Activities

Understanding

SUN EXPOSURE AS A HEALTH ISSUE

Exploring and understanding how sun exposure is a health issue relevant to students themselves and their peers

- ▶ Students describe and discuss what they know about the reasons for sun protection.

Focus questions could include:

- What are the health risks of exposing your skin to the sun?
- What are the risks of prolonged exposure to sunlight?

Teaching considerations

Sun exposure may cause sunburn (in severe cases leading to blistering and peeling of the skin), heat stress, dehydration and, in the long term, skin cancer.

- ▶ Students describe why exposure to the sun is a health issue for young people, particularly for those who are fair-skinned.

Focus questions could include:

- Why does Australia have a high rate of skin cancer?
- Are there any inherited biological factors that affect the way our bodies respond to sun exposure?
- How does skin pigmentation affect the response to sun exposure?
- Do young people get skin cancer? Why?
- How important is sun protection in preventing health problems for you and your peers?

- ▶ Students discuss the different ways in which people avoid or minimise exposure to the sun.

Focus questions could include:

- What facilities are provided at the local park or swimming pool so that people can avoid or minimise their exposure to the sun?
- What else do local councils provide so that people can avoid or minimise their exposure to the sun?
- What does your school do so that students can avoid or minimise their exposure to the sun?

- ▶ Students discuss the actions that they take to avoid or minimise their exposure to the sun.

Focus questions could include:

- When you are at home, what do you do to avoid or minimise exposure to the sun?
- When you are playing sport or exercising, what do you do to avoid or minimise exposure to the sun?

- ▶ Students compile a list of measures that are used to help people protect themselves from the sun.

Planning

COMMUNITY CONCERN ABOUT EXPOSURE TO THE SUN

Investigating why there is such a high level of community concern about exposure to the sun

- ▶ Students research the following statistics on skin cancer in Queensland:
 - incidence;
 - age of sufferers;
 - location of sufferers;
 - morbidity (rate of illness) and mortality (rate of death) due to skin cancers.

Focus questions could include:

- Which age groups are most affected by skin cancer? Why?
- What reasons might explain the overall incidence of skin cancer in Queensland?

Teaching considerations

To help students explain trends evident in the statistics that they collect, direct them to consider factors such as:

- intensity of ultraviolet radiation;
 - whether the population in a region is predominantly fair-skinned;
 - differing social values;
 - work, school and recreational habits.
-

- ▶ Students investigate why Australian health professionals are so eager that young people adopt SunSmart behaviours.

Focus questions could include:

- Why is there so much community concern about sun protection?
- Who pays for treatment of skin cancers?
- Are young people at risk from exposure to the sun? Why?
- What are the long-term costs of sun exposure early in life?
- What can you, as students, do about reducing the level of skin cancer in the population?
- Are your own personal behaviours SunSmart? If so, how? If not, how can you become more SunSmart?

**INFLUENCES ON
SUNSMART
BEHAVIOURS****Investigating the factors that influence the SunSmart behaviours of school students and other people**

- ▶ Students research the biological factors that determine our susceptibility to skin cancer. As part of this research, students can draw conclusions about which groups of people from around the world are more likely to develop skin cancers if they are not SunSmart.

Teaching considerations

Examples of the relationship between biological factors and susceptibility to skin cancer include:

- Fair-skinned people have a greater susceptibility.
- People with fair hair or red hair usually have fair skin and hence a greater susceptibility to skin cancer.

Note:

- People with dark skin and hair can also suffer skin cancer, but their susceptibility is less.
- People with fair skin in cooler climates are less susceptible to skin cancer than people with fair skin in warmer climates.

- ▶ Students develop a self-assessment questionnaire to monitor their SunSmart behaviour.

Teaching considerations

When students are developing their questionnaires, encourage them to include questions on:

- hat use;
- hat type;
- type of clothing;
- availability and use of shade;
- sunglass specifications;
- sunscreen use;
- SPF category of sunscreen;
- exposure to the sun between 10.00 a.m. and 2.00 p.m.;
- sunburn frequency.

A sample questionnaire is available on pp. 107–109 in *Working towards a SunSmart Queensland* (Queensland Cancer Fund 1997). This could be readily modified for students to use in self-assessment. It could also be developed as a questionnaire for students to give to other students to complete.

- ▶ By completing their self-assessment questionnaire, students investigate how SunSmart their current behaviours are. They then collate the class responses to determine how SunSmart the whole class is.
- ▶ Students select a target group of other students within their school. Target groups could include: an age group; fair-skinned people; cultural groups. They give the questionnaire (modified if necessary) to members of the target group to complete. They also assess the group's SunSmart and non-SunSmart behaviours by observing the group in an outdoor recreation or play setting between 10.00 a.m. and 2.00 p.m. (Australian Eastern Standard Time).

They record the observed behaviours on a checklist. They also record weather conditions, temperature and the availability of shade. A sample checklist is included on pp. 104–105 of *Working towards a SunSmart Queensland* (Queensland Cancer Fund 1997). This can be readily modified for use by students.

► Students identify the SunSmart and non-SunSmart behaviours of the target group by examining the data obtained from the questionnaire and from observation. They also suggest what barriers there might be to changing non-SunSmart behaviours.

Teaching considerations

Common barriers to changing non-SunSmart behaviours are:

- complacency;
 - resistance to wearing hats and other sun-protective clothing;
 - resistance to wearing sunscreen;
 - hats that don't stay on;
 - availability of, and access to, shade;
 - financial costs to students, parents and the school.
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► Students investigate one of the social factors affecting whether their own behaviour is SunSmart or not — for example, the influence of their peers. Examples of behaviours affected could be:

- sun-tanning;
- wearing particular types of clothing;
- wearing baseball caps in preference to broad-brimmed hats.

Focus questions could include:

- Do your peers influence your SunSmart behaviour? Why?
- Are the influences of your peers positive or negative with respect to your own health and SunSmart behaviour?

► Students identify the social and environmental measures that their school takes to prevent or minimise student exposure to the sun. They discuss the incentives for and barriers to the success of these measures.

Focus questions could include:

- What area of the school grounds is covered by structures that provide shade?
- How does your school's uniform policy relate to sun protection?
- Is the uniform sun-safe? How do you know?
- Are broad-brimmed hats a part of the uniform?
- Are hats a compulsory part of the uniform?
- Is the wearing of hats compulsory during sport and leisure time at school?
- What is the school's policy on wearing sunglasses during school time?
- Does the school provide sunscreen for students?
- Is there a 'no hat, no play' policy at your school?
- What other policies and strategies are currently in place to reduce exposure to UVR?

- What other sun-protection measures does the school have in place?
- How could we make the school environment safer by improving sun-protection measures?
- How could we go about making the school environment SunSmart?
- What other possible approaches can you suggest?
- What barriers might there be to these approaches?

Teaching considerations

Examples of sun-protection measures that schools may take include:

- making the wearing of hats compulsory when students are outside;
- ensuring that uniforms are SunSmart;
- scheduling outdoor play times to avoid peak UVR levels;
- installing shade shelters;
- planting trees;
- covered walkways.

For examples of possible barriers to changing non-SunSmart behaviours, see page 8.

A SUNSMART ACTION PLAN

Developing an action plan to implement a SunSmart strategy for a target group within the school

► From the observations that students made earlier of a target group (see pages 7–8), they select a non-SunSmart behaviour or a sun-exposure problem that they identified within the group. Students propose one or more of the following types of strategies for changing this behaviour or remedying the problem:

- an environmental strategy — for example, using shade structures and shade trees to modify the physical environment;
- an organisational strategy — for example, altering the school timetable to avoid exposure to the sun between 10.00 a.m. and 2.00 p.m.; providing sunscreen in dispensers around the school;
- an educational strategy to promote SunSmart behaviour— for example, providing parents and students with information about skin cancer and SunSmart behaviour; or promoting the wearing of SunSmart clothing, hats and sunglasses.

Students modify the strategy in their action plan to overcome any barriers against SunSmart behaviours.

Focus questions could include:

- What is the aim of your action plan?
- Have you examined the data from individual questionnaires and the checklist of observed behaviours to identify the needs of your target group?
- Are you aware of the barriers to implementing your action plan? If so, what are they?
- What methods/incentives will you use to change your target group's behaviour? Which will be the most effective?
- Who can help with implementing the plan?
- What are you going to do to implement the plan?

► As a class, students choose the action plan that they believe would be of the most benefit in improving the target group’s level of SunSmart behaviour.

Focus questions could include:

- Which action plan would most effectively improve the level of SunSmart behaviour in this target group? Why do you think this?
- Which action plan would be the easiest to implement?
- Which action plan best deals with the health issue of sun protection?
- Which action plan best reduces the health risk of sun exposure?
- Do you think that the plan would overcome the identified barriers to SunSmart behaviour? If so, how? If not, why not?

Acting

RESEARCH FINDINGS AND ACTION PLAN

Presenting the chosen action plan and research findings

► Students choose the action plan that they believe would be most successful. They present the plan, together with the research findings on which the plan is based, to one or more of the following:

- the principal and the school administration;
- the Student Council;
- the school parents’ organisation;
- the school planning committee.

Teaching considerations

To produce the best possible action plan, the class could incorporate the best points from all the individual plans into a class plan.

The plan could be presented in a variety of forms, for example:

- a formal written report;
- a presentation using multimedia resources;
- a presentation in which representatives of each of the target groups participate;
- a brochure or poster outlining the plan;
- a letter to the principal, suggesting and justifying an appropriate sun-protection strategy for a target group in the school.

Reflecting

REVIEW OF THE STRATEGIES DEVELOPED

Reflecting on the inquiry process used to develop the action plan and on what has been learned during this process

► Students recall the health effects of exposure to the sun.

In reflecting on the results of their research, students discuss how their own knowledge of and attitudes towards the social, biological and environmental factors influencing SunSmart behaviours may have changed during this unit.

► Students brainstorm the advantages and disadvantages of using the inquiry approach to plan action on a health-related issue.

Focus questions could include:

- Did the inquiry process help you to identify information that you needed for your action plan? If so, how? If not, why not?
- What are the advantages and disadvantages of conducting inquiries to find information on health issues?
- Are there other ways of working out how to resolve public health problems? If so, what?

► Students reflect on their role as change agents who have influenced the adoption of SunSmart behaviours in their school.

Focus questions could include:

- What changes were made as a result of your actions?
- How successful were your actions?
- Were the actions in your action plan easy to carry out? Did any of them not succeed? Why?
- What short-term, medium-term and long-term effects will your actions have on people's health?
- How will members of the target group continue to change their behaviour to become more SunSmart?
- Can this process of change continue without the support of the group's peers? Why?
- How did it feel to be able to improve the health of the school community?

Teaching considerations

If you are teaching this material over a number of years to classes at the same level, students in one year can evaluate the actions of previous classes. Over time, trends will become apparent in the results your classes collect. This information provides an additional resource to enable your students to understand how patterns of SunSmart behaviour, and the resulting health effects, may be changing in your school.

Acknowledgments

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This sourcebook module should be read in conjunction with the following Queensland School Curriculum Council materials:

Years 1 to 10 Health and Physical Education Syllabus

Years 1 to 10 Health and Physical Education Sourcebook: Guidelines

Health and Physical Education Initial In-service Materials

ISBN 0 7345 2073 5

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