



Researching sun-safety knowledge and behaviours

This research task is aimed at Years 7 and 8 students in Australian schools.

The purpose of the task is to increase students' understanding of skin cancer and sun safety and to encourage their active, positive engagement in promoting sun-safe behaviours.

About the task

The task is centred around:

- developing knowledge about skin cancer and sun safety
- students researching the knowledge and behaviours of a target market in relation to sun-safe clothing, hats and sunglasses to address the research questions:
 - How well does the target market **know** the strategies (behaviours) related to sun-safe clothing, hats and sunglasses?
 - Does the **behaviour** of the target market comply with the strategies?

There are two options for the research:

- Option 1 requires students to use an **online survey tool**.
- Option 2 requires students to undertake **research by interview**.

In both options, students use their findings to recommend a sun-safe strategy or message that needs to be promoted to the target market and suggest how they could promote this strategy or message to the target market. They explain how the knowledge and behaviour of a target market influence the design of a product to promote sun safety.

Resources are provided to support the students' research.

This task can stand alone or it can be used to inform the [Campaign against skin cancer–The textiles way](#) design challenge. In the latter case, students use their research findings to decide on the sun-smart behaviour that they will promote.

What students submit

- A report of their research.

Assessment

The task can provide evidence of learning related to both the Health and Physical Education (HPE) and the Design and Technologies (D&T) curricula. However, the task does not need to be changed if assessment and reporting is confined to only one learning area.

Student work is assessed on evidence of the student's ability to:

- investigate the sun-safety knowledge and behaviours of a target market with respect to clothing, hats and sunglasses (HPE)
- evaluate their findings to identify messages and behaviours that need to be promoted to the target market (D&T)
- explain how the sun-safety knowledge and behaviours of a target market can influence the design of a product to promote sun safety (D&T).

An assessment guide is included. The assessment guide indicates from where the evidence of learning is sought. If a related learning experience is omitted then alternative opportunities to demonstrate evidence of learning should be provided, or the assessment guide adjusted accordingly.

Curriculum connections

This task relates to the Australian Curriculum: Years 7 and 8 Health and Physical Education (HPE) and Years 7 and 8 Design and Technologies (D&T). The following content descriptions and aspects of the achievement standard are addressed in the task.

Content descriptions	Aspects of the achievement standard	Criteria
<ul style="list-style-type: none"> Investigate and select strategies to promote health, safety and wellbeing [ACPPS073] (HPE) 	<ul style="list-style-type: none"> Investigate strategies and practices that enhance their own, others' and community health, safety and wellbeing (HPE). 	Investigating (HPE)
<ul style="list-style-type: none"> Critique needs or opportunities for designing [ACTDEP035] (D&T) 	<ul style="list-style-type: none"> an evaluation of needs or opportunities (D&T). 	Investigating and defining (D&T)
<ul style="list-style-type: none"> Investigate how competing factors including social considerations are prioritised in the development of designed solutions for preferred futures [ACTDEK029] (D&T) 	<ul style="list-style-type: none"> Explain factors that influence the design of products (D&T). 	Knowledge and understanding (D&T, Technologies and society)

Note that it is not necessary for any one challenge to address all content descriptions and/or achievement standards in any one band. Other tasks, including those offered in other subject areas, will provide further evidence of learning.

To reflect the intent of the curriculum, students are given the opportunity to:

- conduct research into knowledge and behaviours of a target market in relation to sun-safe clothing and accessories (hats and sunglasses) and identify one or more behaviours (strategies) that need to be promoted to the target market **(Investigating, HPE)**
- use their findings to evaluate client needs regarding messages and behaviours that need to be promoted to the target market **(Investigating, D&T)**
- explain how social factors (e.g., the knowledge and/or behaviour of a client or target market) influence the design of products to promote sun safety **(Knowledge and understanding, D&T, Technologies and society)**.

The research could be carried out as a stand-alone HPE investigation or could be the investigative stage of a design challenge whereby the investigation provides evidence of the knowledge and/or behaviours that need to be improved. Students could then develop a design solution for a product or service to promote the knowledge and/or behaviours to be improved.



Some suggested learning experiences

Developing introductory knowledge about skin cancer and sun safety

Before commencing their research, it is important for students to develop an understanding of:

- the importance of protection from the sun's ultraviolet (UV) rays
- the key messages for sun safety, especially as they pertain to clothing, hats and accessories.

Teacher notes 1: [Establishing knowledge about skin cancer and sun safety](#) discusses and provides links to teacher and student resources to help develop this understanding. The resources include teaching ideas and two slide-show presentations, as well as fact files, three-level guides and other student activities.

These introductory materials have been developed for students in Years 7–12, with teachers able to select and/or adapt the resources to suit the cohort.



Scaffolding the research and research report

Please read these notes in conjunction with Guideline A: [Guidelines for writing your research report](#).

Before embarking on the research, it will be necessary to unpack the research questions with students:

- How well does the target market **know** the strategies (behaviours) related to sun-safe clothing, hats and sunglasses?
- Does the **behaviour** of the target market comply with the strategies?

Report introduction

Students should include in the Introduction some introductory information about the topic—see Guideline A: [Guidelines for writing your research report](#) for suggested content.

This introductory information should be covered before students begin their investigation. Then students summarise what they have learnt as the introduction to their research report. To develop this knowledge, see ideas in Teacher notes 1: [Establishing knowledge about skin cancer and sun safety](#), as outlined earlier on this page.

Report method

Students need to learn how to:

- decide who to survey
- write survey questions
- conduct an online survey and/or conduct interviews, depending which type of research they are conducting
- collate their responses.

Who and how many to survey

Students should be guided to:

- define the target market, e.g., Year 10 students, Year 6 soccer players, parents of toddlers etc.
- try to collect data on an even number of males and females, unless they are specifically targeting one or the other.

The size of the sample will depend on the nature of the community/school size etc.:

- For online research, 20 respondents (10 males and 10 females) is a small sample but should give reasonable data. Students could work in pairs to collect 20 responses between them but then write their own reports.
- For research by interview, eight to ten respondents is a small sample but should give reasonable data. However, this is still a lot of interviews for each student—again, they could work in pairs to collect 8–10 responses between them but then write their own reports.

Writing survey questions

Types of questions

Discuss different types of questions, for example:

- Examples and the value of True/False questions [which are really multiple-choice questions where only one response can be given], for example:
 - You don't need to cover up on hot days if it is cloudy:
 - True
 - False
- Examples and the value of multiple-choice questions related to sun safety, for example:
 - Sunglasses should be:
 - Large
 - Close fitting
 - Wraparound
 - All of the above

Note that the research questions ask how well the target market practises sun-safety strategies, so give examples of how students can get this information e.g.

- On hot sunny days, how often do you wear a hat?
 - Always
 - Usually
 - Rarely
 - Never

That is, it is preferable not to ask just "Do you wear a hat on hot sunny days?"

Developing the questions

- Use Fact file D: [Five ways to be sun safe](#) and demonstrate to students how to analyse the fact file to identify appropriate questions related to the behaviour of the target market.
- See Student response 29: [Developing survey questions about sun-safety](#).

Part A of this resource recaps the key messages and behaviours to be promoted. Parts B and C provide examples and tips for developing questions and guide students to write questions to determine both the knowledge (Part B) and behaviours (Part C) of the target market. Students could work in pairs or small groups to do this and should indicate the correct responses.

Check and/or assess the student questions before they are included in the student surveys. Assess questions and proposed correct responses not only for accuracy but also for depth and the insight shown (this will assist in assessing student work against the criteria and standards).

How to conduct surveys

Brainstorm a range of ways that students could determine the sun-safety knowledge of the target market. For example:

- online surveys
- interviews
- looking up previous research done in this area.

It could be that the teacher makes the call as to which survey method will be used. Or some students could use one method e.g. online and other students use another method e.g. interview.

Conducting online surveys

If using an online survey, thought needs to be given to how students will communicate the online survey link to participants.

An online survey tool such as SurveyMonkey is recommended.

Online tools can be used to design the survey questions and send the survey by email to selected participants. Typically, they are:

- free for up to 10 questions and 100 responses
- easy to use to create and send out
- able to collate the results.

Setting up the online survey

Demonstrate to students how to set up an online survey and how to compose True/False and multiple-choice questions in the online survey. The help centres for some online tools (for example, SurveyMonkey) are very comprehensive and include videos on how to design different question types.

Note: It is suggested that students do each stage (set up, True/False and multiple-choice questions) immediately after the teacher has demonstrated how to do it.

Collating online survey responses

With most online tools, the responses are, to a large extent, automatically collated for students.

Students need to learn how to print and/or save and/or transport the responses. For those on a basic (free) plan, an easy way to transfer results is to take screen shots and then paste them into a report.



Conducting surveys by interview

Considerations before administering the interview:

For the interview survey, students could work in pairs to design the questions and then each student could interview half of the participants. Or students could work in pairs with one asking the questions and the other scribing the responses. It might be appropriate for students to role-play asking the questions, recording etc. before actually conducting the interviews.

Introducing the survey to the interviewee

When students conduct their interviews it is recommended that they:

- introduce themselves and say who they represent (e.g., 'I am Susan from Year 8 at Sunshine School')
- check that the interviewee has not been interviewed before for the same project
- briefly explain what they are investigating and why
- check that it is okay to ask a few questions, saying that it won't take long
- tell the interviewee that their name will not be used in the report
- record the interviewee's responses on the pro forma sheet
- thank the interviewee for their time.

Guideline B: [Sample introduction when surveying by interview](#) provides an exemplar of an introduction.

Collecting interview data

A sample recording template is found in the student resource Guideline C: [Sample recording template for researching sun-smart behaviours by interview](#). Examine the recording template with students. Students could critique the template and identify what they like and what they don't like, adding their suggestions for improvement. The teacher could provide the template as a Word document so that students could adapt it suit the questions that they have devised.

Collating interview responses

Each pair of students will have approximately ten interview schedules. Guideline D: [Sample data summary tool for researching sun-smart behaviours by interview](#) provides one example of a data collation tool. Again, students could critique the template and identify what they like and what they don't like, adding their suggestions for improvement. The teacher could provide the template as a Word document so that students could adapt it suit the questions that they have devised.

Results and analysis

Discuss with students:

- What should be presented in the report and why, for example, the total number of male and total number of female participants who:
 - answered each question correctly
 - complied with each sun-safe behaviour strategy.
- What should not be in the report, for example, each individual response, and why not.
- How the data can be presented so that it is easy to read:
 - Show examples of simple graphs
 - Show examples of simple tables (which might be easier if students struggle with graphs).

See Guideline A: [Guidelines for writing your research report](#) for what to include and some examples of graphs and tables.

Discussion

See Guideline A: [Guidelines for writing your research report](#) for what to include in the Discussion.

The discussion should consider what the target market knows and doesn't know about the use of clothing, hats and sunglasses for sun safety and which sun-smart strategies related to clothing and accessories are and are not being practised.

It should also include an explanation of why they think the results were the way they were. Students will probably need to use modal verbs (e.g., 'might', 'could' or 'would') when explaining the results, as they don't actually know the answers.

Their discussions should be such that they guide their recommendations.

Conclusions and recommendations

See Guideline A: [Guidelines for writing your research report](#) for what to include.

Reaching the required standard of achievement

Please see the assessment guide to determine expectations of high-achieving responses and make sure students are given the opportunity to reach this high standard.