Stage 6 Textiles and Design

# Textile technology and environmental sustainability

Students gain an understanding of the impact of the textiles industry on the environment. Students identify appropriate solutions to current issues such as sustainability and pollution. There are many processes and practices used in the manufacture and processing of textile items that can cause significant harm to the environment. Students examine Australian legislation that regulates these issues.

## Outcomes

* **H5.1** investigates and describes aspects of marketing in the textile industry
* **H5.2** analyses and discusses the impact of current issues on the Australian textiles industry
* **H6.1** analyses the influence of historical, cultural and contemporary developments of textiles.

[Textiles and Design Stage 6 Syllabus](https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/technologies/textiles-and-design-syllabus) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2013.

## Suggested strategies

This resource is adaptable for teachers to use with online platforms such as Google Classroom. Links to the videos and websites could be posted for students to access during learning at home. The activities and questions could be set as classwork documents within Google Classroom, which the students complete and submit for a grade or feedback. Alternatively, students could receive the activities and questions as worksheets to complete and submit at a later date.

The suggested activities and questions that relate to the listed resources are not an exhaustive list and may be added to or edited to suit your students learning needs.

## Part one – environmental sustainability

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| Focus area | HSC Australian textile, clothing, footwear and allied industries |
| Syllabus content | Appropriate textile technology and environmental sustainability* selection of appropriate technology in the industry
	+ resources, alternatives and limitations
* appropriate and sustainable textile resources
	+ recycling
	+ pollution
	+ government legislation
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| Resources | * [Fashion's crippling impact on the environment](https://www.youtube.com/watch?v=ECkLgq2W9RU&t=150s) (duration 3:39)
* [Sustain your style](https://www.sustainyourstyle.org/old-environmental-impacts)
* [The problem with fast fashion](https://www.youtube.com/watch?v=iq0--DfC2Xk) (duration 5:23)
* [Fast fashion quick to cause environmental havoc](https://sustainability.uq.edu.au/projects/recycling-and-waste-minimisation/fast-fashion-quick-cause-environmental-havoc)
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| Activities and or questions | 1. To introduce this topic, watch [Fashion's crippling impact on the environment](https://www.youtube.com/watch?v=ECkLgq2W9RU&t) (duration 3:39).
2. Stages of the textile product lifecycle are:
	1. Raw material processing (growing natural fibres and producing synthetic fibres)
	2. Manufacturing (fabric production and colouration)
	3. Distribution
	4. Product use (packaging, washing and care of the product)
	5. End of life (waste)

Outline the environmental impact of each stage of the product lifecycle and suggest possible alternatives to minimise the impact on the environment. This could be presented in a three column table (stage, environmental impact, possible alternatives).1. Read the article [Sustain your style](https://www.sustainyourstyle.org/old-environmental-impacts) and list 8 ways the textile industry impacts on the environment.
2. Watch [The problem with fast fashion](https://www.youtube.com/watch?v=iq0--DfC2Xk) (duration 5:23) and read [Fast fashion quick to cause environmental havoc](https://sustainability.uq.edu.au/projects/recycling-and-waste-minimisation/fast-fashion-quick-cause-environmental-havoc). Write a magazine article (or produce a multimedia presentation) to highlight the issues associated with fast fashion and suggest how consumers can minimise their impact.
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## Part two – government legislation

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| Focus area | HSC Australian textile, clothing, footwear and allied industries |
| Syllabus content | Appropriate textile technology and environmental sustainability* selection of appropriate technology in the industry
	+ resources, alternatives and limitations
* appropriate and sustainable textile resources
	+ recycling
	+ pollution
	+ government legislation
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| Resources | * [The Environment Protection and Biodiversity Conservation Act 1999](https://www.environment.gov.au/epbc/about)
* [NSW Environmental protection agency](https://www.epa.nsw.gov.au/your-environment/chemicals/regulating-chemicals-nsw)
* [Better cotton initiative](https://bettercotton.org/better-cotton-standard-system/)
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| Activities and or questions | 1. Create a fact sheet on the environment protection and biodiversity conservation act 1999. Ensure to outline how it applies to textile manufacturers and retailers.
2. View the NSW Environmental protection agency website. Outline six other pieces of legislation that impact on the textiles industry. Explain how they apply to the textiles industry.
3. Research better cotton initiative. Outline what it is and analyse how it will help countries like Australia meet their environmental protection and sustainability goals.
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