

Is this garment sustainable?

Workshop instructions for educators



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Aalto University
School of Chemical
Engineering

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Duration: 45-60 min

Target group: students ages 16-24

Goal

The students learn how to recognize the material, quality, and sustainability of clothes

Prerequisites

Basic understanding of sustainability, circular economy, and textile production. For example, video lectures provided by Aalto University Junior on YouTube (available in Finnish and Swedish).



Helena Westerback: Mode och miljö

56 views • 9 months ago



Helena Westerback: Muoti ja

ilmastonmuutos

Equipment needed

A projector showing the workshop instructions for the students and the website goodonyou.eco

One garment for every two or three students plus one for the instructor, preferably shirts and blouses. The garments must have:

- The tag that shows the material and manufacturer
- A knitted or woven fabric structure

If possible, the clothes should be provided by the educator. Students' clothes may have the tags removed and we don't want to shame individual students for possibly unethical or low-quality clothes. The free section in Kierrätyskeskus has plenty to choose from.



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Circularity

1a) What material is it?

Read the tags on the garment. In some cases, you can also recognize the material by touching the fabric.

1b) Is the material natural, bio-based or synthetic?

Natural: cotton, wool, silk, linen, sisal

Bio-based: viscose (=rayon), Lyocell, cupro, acetate

Synthetic: polyester, elastane, polyamide (=nylon), acrylic

Remember the materials of zippers, buttons, thick prints...

2a) What makes the garment easy or hard to recycle?

Easier to recycle	Harder to recycle
Single materials or chemically similar blended materials (e.g., cotton+viscose)	Blended materials (elastane is particularly difficult)
Single color	Many colors
No prints	Thick prints
Only fabric	Zippers, buttons, sequins...
Rough fabric, loose knit or weave	Tight and dense knit or weave

2b) What makes the garment easy or hard to repair?

Easier to repair	Harder to repair
Rough, thick and homogeneous fabrics	Thin fabrics with irregularities
Simple design	Complex design



Quality

1. Fabric

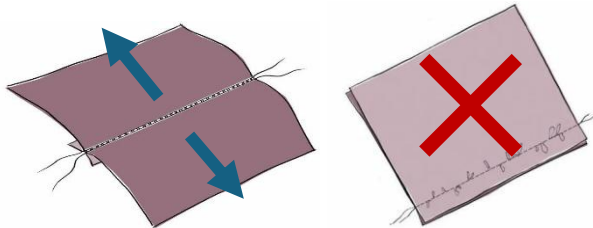
Hold the fabric towards the light and look at how homogeneous it is.

A damaged and worn-out tag means that the garment has been washed multiple times. If the fabric nonetheless holds no or only a little sign of damage, it's a sign of good quality.

High quality	Low quality
Even fabric thickness.	Thinner and thicker areas
Rough and thick fabrics	Thin and flimsy fabrics
No damage	Visible damage

2. Seams

Look closely at the seams. Gently pull them apart to investigate the tightness. A gap between the fabric pieces indicates a loose seam.



High quality	Low quality
Consistent stitch length	Varying stitch length
Short stitch length	Long stitch length
Tight and tense seams	Loose seams
Good and tidy looking	Defects, mistakes, loose threads
The fabric is flat and straight under the seam	The fabric warps under the seams

3. Assembly

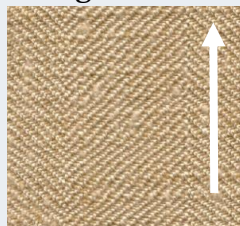
Look at how the pieces of fabric are put together. Hold it in the shoulder seams to see if it's symmetrical: equal sleeve length, equal sleeve angle, etc. Look closely at the direction of the fabric knit or weave. Does it form straight horizontal and vertical lines?

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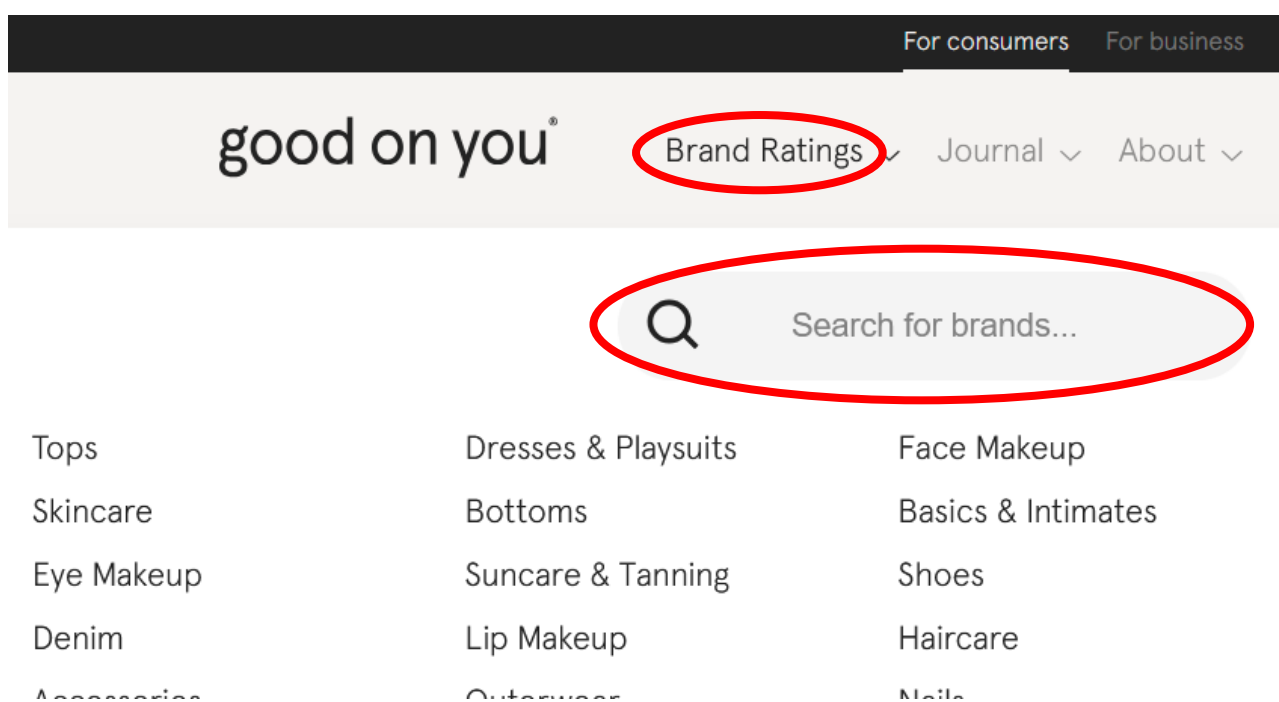


Poorly aligned fabric pieces. See how the pattern doesn't match.

High quality	Low quality
Patterns align	Patterns do not align
The garment is symmetrical (if it intends to be)	The garment is unintentionally asymmetrical.
The fabric direction is straight 	The fabric is askew 

Ethicality

1. Look for the brand of the garments (tags, logos...)
2. Visit the website: <https://goodonyou.eco/>
3. Go to Brand Ratings
4. Search for brand
5. Open and read the review



Bonus task

Discuss the possible limitations with this database and other ways to judge the ethicality and sustainability.



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Wrap-up

- 1. Discuss the workshop in class (prompts found in the students' instructions).**
- 2. Share this material with colleagues that might be interested.**
- 3. If you have the time, please consider contacting me to let me know how I can develop and improve this workshop!**



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Afterwords

Why is this topic important?

Fast fashion is an ever-growing cause of major environmental and social damage. The production keeps increasing, especially the production of fossil-based synthetic textile.

Marketing strategies aimed at adolescents and young adults take advantage of their search for identity and personal style, which leads to the overconsumption of cheap and low-quality fashion.

Even though many already know that fast fashion is a problem, it's hard to avoid buying it. Greenwashing is a misleading marketing tactic where brands claim to be sustainable, which enables them to put a higher price on their clothes.

It takes practice to see through greenwashing and recognize high and low quality. I hope that this workshop will give young people the tools and inspiration to buy less but better clothes.

About the author

I'm Helena Westerback, a doctoral student at Aalto University researching new, more sustainable ways to produce textile fibers with the properties needed for high-quality clothes. While this type of research is important for the green transition in the fashion industry, it is equally important that we as a civilization change our consumption habits.

As a scientist, I see it as my duty to share my knowledge with the public, not just the academic community.



Impact starts with knowledge.

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If you have questions about or ideas for this workshop, you can contact me through helena.westerback@aalto.fi

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