

Graduation Gowns: Buying vs. Renting

LIFE CYCLE ANALYSIS

The caps and gowns are made out of polyester. A graduation cap and gown weighs approximately 500g.

Polyester Fiber Production (1 KG)

Energy (MJ) = 97 MJ > 24.25 MJ

Water (L) = 17 L > 4.25 L

Carbon Dioxide Emissions = 2.3kg > 0.575 kg

Polyester Fabric Weaving (1 KG)

Energy (MJ) = 33 MJ > 8.25 MJ

Water (L) = 1,291 L > 322.75 L

Carbon Dioxide Emissions = 1.5kg > 0.375 kg

Use (Assuming used once, no washing)

Disposal (1 KG)

Incineration = 33 MJ > 8.25 MJ

Landfill Biodegradable = No

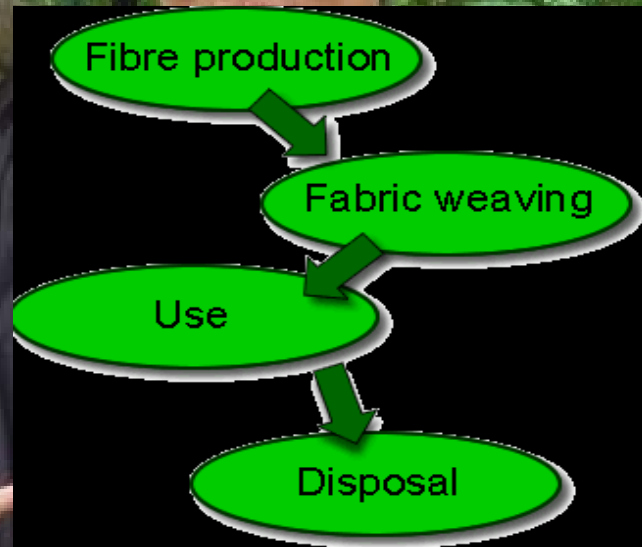
Recycled = Could be, but currently is not

RENTALS

- Saves students' money
- Saves immense amount of material
- Prevents tons of CO2 being released
- Prevents sending waste to landfill

ALTERNATIVES

- Donations



TOTAL ENERGY = 203,750 MJ

TOTAL WATER = 1,635,000 L

TOTAL CO2 RELEASED = 4,750 KG

Works Cited

- <http://www.sustainability-ed.org/pages/example4-3.htm>
- http://bookstore.ucdavis.edu/graduation/cap_gowns.cfm
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