

TEXTILES

& USE-ORIENTED DESIGN

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TEXTILES 101

FABRIC: WOVEN OR KNITTED, NATURAL OR SYNTHETIC FIBERS, VARIETY OF ATTRIBUTES

NOTIONS: SMALL OBJECTS OR ACCESSORIES SUCH AS BUTTONS, ZIPPERS, SNAPS, RIBBON, SEQUINS, BEADS, ETC.









Consumer Motivation	
Utilitarian	Workwear, sportswear, adaptive apparel, Industrial textiles, medical textiles
Hedonic	art Installations, emotional/sensory Items, decorative textiles, and special events

TEXTILE TALK

LET'S THINK

WHAT ARE TWO TEXTILES YOU INTERACT WITH DAILY?

MATERIALITY

Attribute	Woven	Knit
Structure	Predictable	Organic
Stretch	Generally stable, non-stretch	Most or all directions
Stability	Retains shape under tension	Tends to curl at edges
Drape	Crisp and artchitectural	Fluid and shape-conforming
Thermal Stability	burn, self-extinguishes, melts, Inert	
Other	sourcing (price, upcylcing), texture, finish, dyeing	

TEXTILE TALK













TEXTILE TALK

APPROACH

IN TEXTILE & APPAREL FIELD

HUMAN-CENTERED DESIGN

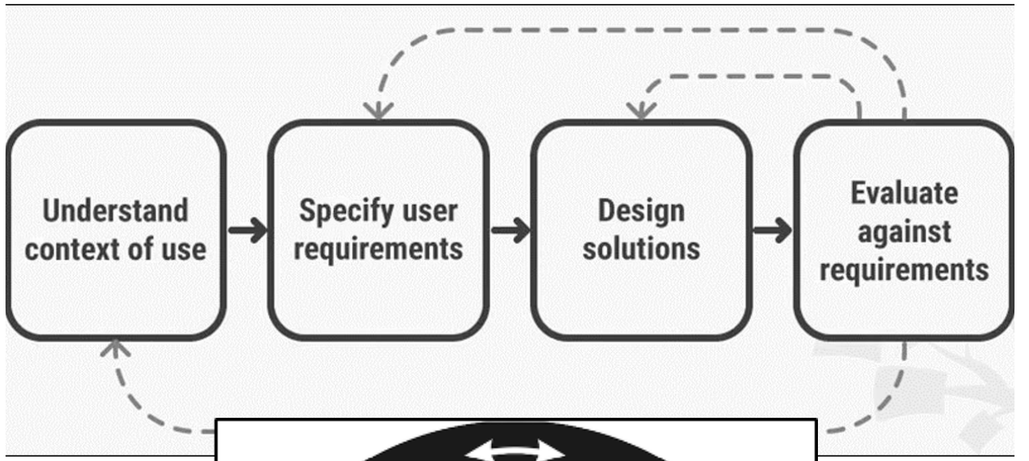
IMPAIRMENTS: PHYSICAL, SENSORY, DEVELOPMENTAL, AND MENTAL

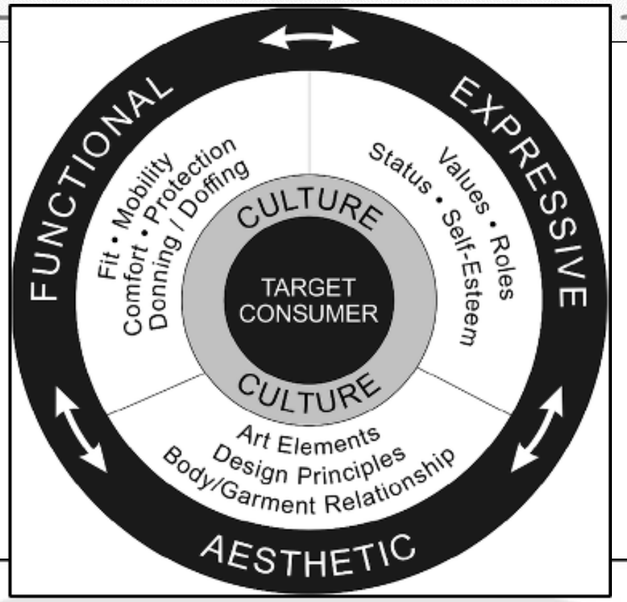
UTILITARIAN & HEDONIC

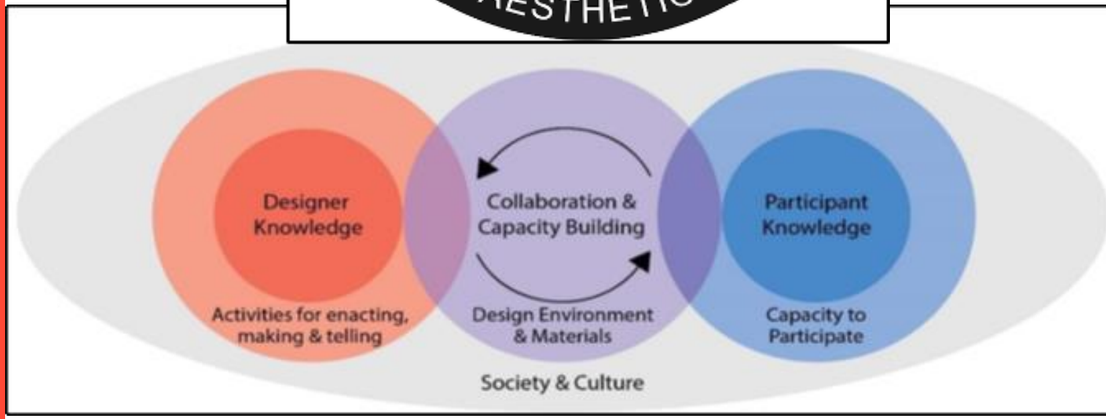
CASE STUDIES, INTERVIEWS, OBSERVATIONS, ARTIFACTS, PROTOTYPING,

DESIGNS IMPROVE THROUGH A BALANCED EXCHANGE & NEGOTIATIONS

TEXTILE INNOVATIONS TOWARDS UNIVERSAL DESIGN







TEXTILE TALK

CASES

WHEELCHAIR USE

PROM DRESS FOR BLIND TEENAGER

ADAPTIVE APPAREL

ADAPTIVE BASEBALL









WHEELCHAIR USE







TEXTILE TALK

BLIND SCHOOL PROM

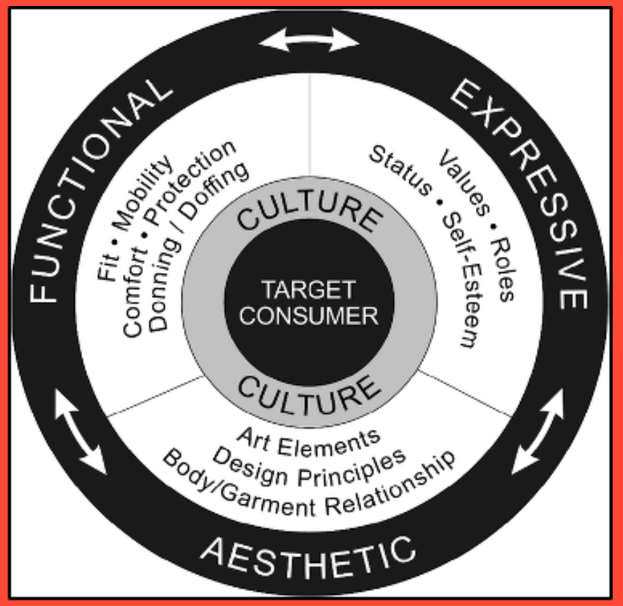




Figure 1. Jazmine, the participant.



Figure 2. Dark red tawny port.



Figure 3. Gold metallic leaves.



Figure 4. Gold 7 mm gemstones.

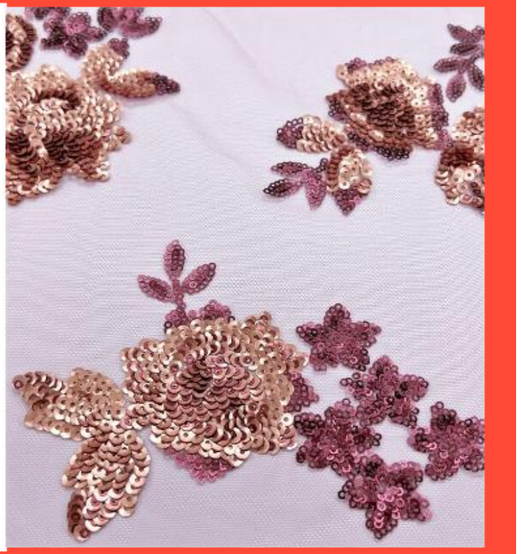
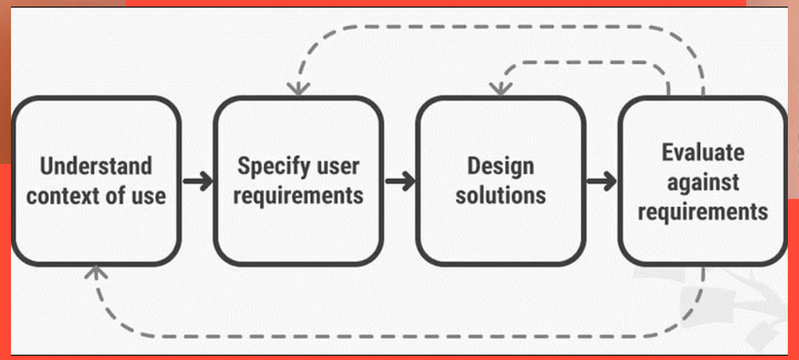


Figure 5. Sequin roses and flowers.

TEXTILE TALK

ADAPTIVE APPAREL













TEXTILE TALK

ADAPTIVE BASEBALL











TEXTILE TALK

SMART TEXTILES ANATOMY

1. ***SENSOR:*** *the textile with propoerties to support the design – conductive threads, pressure-sensitive knits*

1. ***LOGIC:*** *the mircrochip or the "brain" that interprets the signal – if 'X' occurs then….*

1. ***OUTPUT:*** *the use or what actually happens – use or sensory feedback*



TEXTILE TALK

EXAMPLES




For Women
Astroskin Headband
Astroskin Shirt
For Men
Blood Pressure
Activity Level
Skin Temperature
Blood Oxygen Levels
3-Lead ECG, HRV, QRS, RR Intervals
Breathing rate & Volume



ACTIVITY

SMART TEXTILE FOR YOUR EVERY DAY

1. GO BACK TO THE TWO TEXTILES YOU THOUGHT ABOUT AT THE START
2. CHOOSE ONE
3. GIVE IT A UTILITARIAN AND HEDONIC USE
4. MAKE IT A SMART TEXTILE
5. SHARE WITH GROUP

