REVERSE ENGINEERING

Developing technical skills
for Year 11 textiles

Andrea Beazley

CONTEXT
Whangārei Girls' High School

No Level 1 assessment

- Decided to remove assessment as students were focusing on credit counting instead of learning.
- Focus is on learning content not assessment outcomes.
- High levels of stress and anxiety.
- Continue to assess Literacy and Numeracy.

Semester courses

- Our biggest challenge with a condensed time frame:
  - Year 9 for one term,
  - Year 10 and 11 for a semester
  - Full year for 12 and 13.
- No prerequisites in our courses.

- Two Year 11 courses on offer: Designer Inspiration and TFT 101

JUNIOR SCAFFOLDED LEARNING

YEAR 9

INNER MONSTER
Introduction to textiles, touching on the design process and developing a foundation of technical knowledge.

YEAR 10

I HEART ACCURACY
Basic code of practice and machine skills.

HOODWINKED
Introduction to applied design and a focus on accurate pattern cutting and garment construction.

YEAR 11 SCAFFOLDED LEARNING

TEXTILE 101

REVERSE ENGINEERING
Focus on technical skill, vocabulary, garment construction and basic pattern adaptation.

CASS PANTS
Technically challenging construction. Waistband, belt loops, pleats, fly, side angle pockets and jet pockets with french seams.

DESIGNER

ANIMAL INSTINCTS
Ideation at its core and looking for ways in integrate and resolve design ideas by exploring applied design and fabric manipulation.

Building a portfolio and documenting process.

Resolving ideas into a garment, adapting commercial patterns.

SENIOR SCAFFOLDED LEARNING

YEAR 12

STACKER JACKET
Advanced procedures
Advanced procedures, no creative freedom.
Assessment language and specified product with
special features.

PORTFOLIO
Design movement and Conceptual design. Idea
development, final garment and fashion awards.
Adapting commercial patterns.

YEAR 13

PORTFOLIO
Creative freedom. Building a portfolio and
documenting process.

Resolving ideas into a garment, adapting commercial
or pattern drafting.

Applied design for fabric surface transportation.

"We want people to be able to reach a point where they become independent thinkers and self sufficient builders."

Fran Sanchez - Beachlab

BUT WHY?

Student

- Technical skills
- Language
- Knowing their way around the room and resources

- Problem solving skills
- Success in early days of the course
- Getting gently uncomfortable

- Meeting peers
- Getting to know teacher style and expectations

Teacher

- Efficiently training a new group students
- Introduction to room and housekeeping rules
- Foundation skills that can be referred to later in the course.

- Ask 3 then me philosophy set up
- Acknowledging skills the students already have

- Assessing students skills early on
- Seeing who may need additional support

- Report comments early on

BRIEF STRUCTURE

HIT THE GROUND AT A SPRINT

But… keep them guessing. Helps me to set up a quick paced dynamic class.

They quickly realise that they need to be proactive and productive.

EXPERIENCE COUNTS

Find the experts and support the beginners.

LET THEM STRUGGLE

At least for a little bit… This encourages them to problem solve alone or in their group and come to me to check the way forward rather than asking for the solution.

I am able to leave some teams to work quite independently and support those that need it.

DEMOS, TIPS & TRICKS

I make one alongside them using it for demonstrations.

Catering to various learning needs and experience levels.
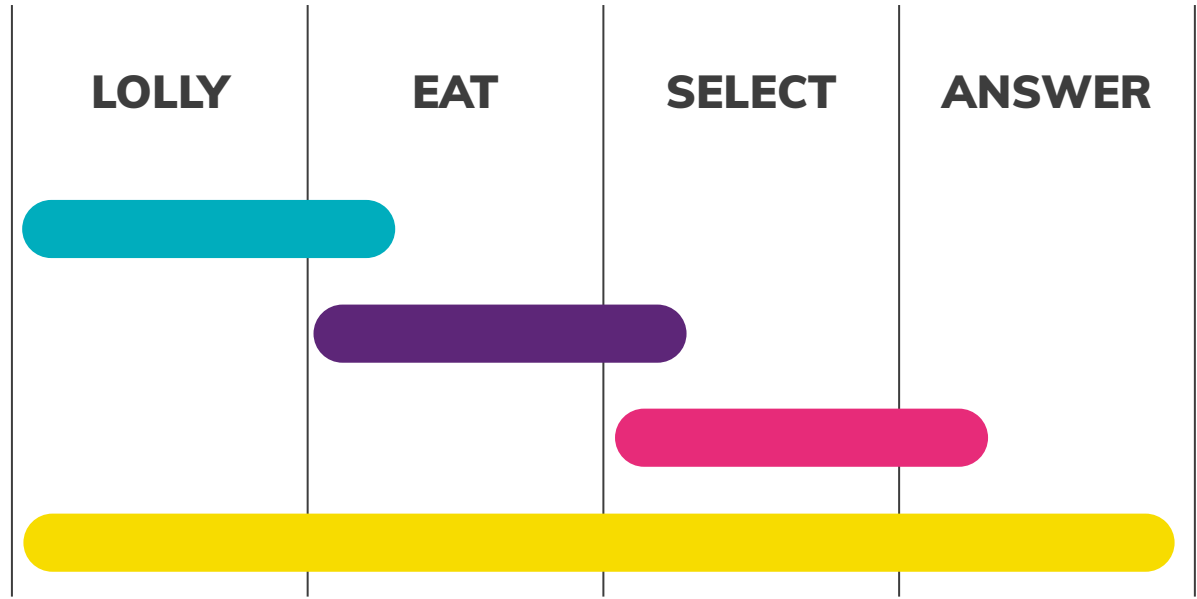
SUCCESS

Evens the playing field with everyone finishing a quality product in the early weeks of the course.

The skills acquired become something we can build on in the main brief.

HIT THE GROUND AT A SPRINT

But… keep them guessing. Helps me to set up a quick paced dynamic class.

They quickly realise that they need to be proactive and productive.

LOLLY	EAT	SELECT	ANSWER

I am easy to lift, but hard to throw. What am I?

FOLDED LINE

Find the experts and support the beginners.

CONFIDENCE METER

MORE

LESS

LESS

MORE

LET THEM STRUGGLE

At least for a little bit... This encourages them to problem solve alone or in their group and come to me to check the way forward rather than asking for the solution.

I am able to leave some teams to work quite independently and support those that need it.

AN INTRODUCTION 11 TFT
reverse engineering

To move forward, we must sometimes look backwards.

Reverse engineering is like solving a puzzle. It's the process of looking at a finished product – a garment, object or software – and figuring out how it was made.
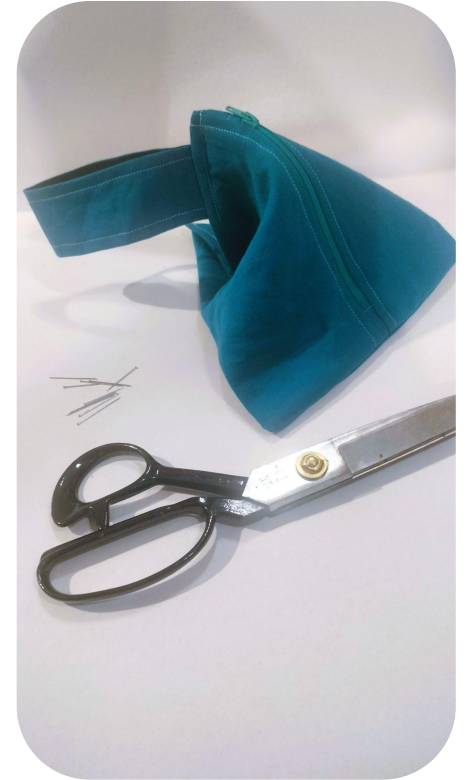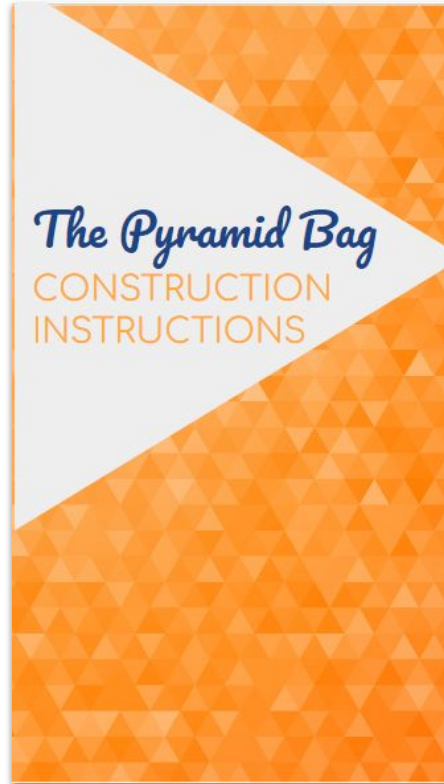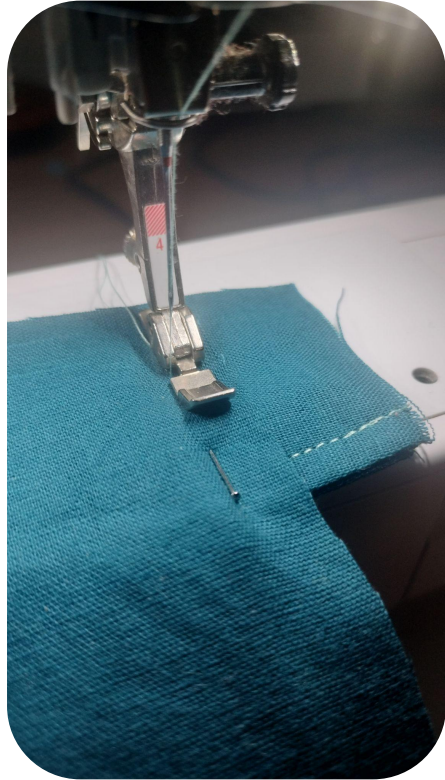
This method is used by technology professionals to understand the inner workings and construction of successful innovations.

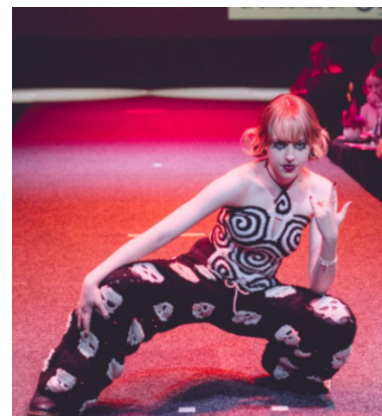## DEMOS, TIPS & TRICKS

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Catering to various learning needs and experience levels.

The Pyramid Bag
CONSTRUCTION
INSTRUCTIONS

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WGHS_TFT

1.4

Demonstrate understanding of techniques selected for a feasible Materials and Processing Technology outcome

92015, 4 credit, External

ACHIEVEMENT

Demonstrate understanding of techniques selected for a feasible Materials and Processing Technology outcome

MERIT

Explain techniques selected for a feasible Materials and Processing Technology outcome

EXCELLENCE

Evaluate techniques selected for a feasible Materials and Processing Technology outcome