

Creating new spaces at home to solve the problems experienced by large families working and studying at home due to covid-19 restrictions.

This submission provides a window into my creative design process, through the context of a mock-up business called 'Native Designs'. My design process frames solutions for issues around sustainability, and explores the benefits of biophilic systems for interior spaces.

The Business Concept

Native Designs does not have a physical shop front. The business operates through a digital platform only. It has a website and social media profile that emphasises the importance of sustainable design practices. Native Designs sells home furnishings, and offers solutions for clients who have problems with the interior spaces of their home.

A glimpse into the Native Designs Website

At Native Designs we offer customers the chance to co-create with our head designer, to create personal, one-off home furnishings that tell your story. We also provide clever solutions for managing the space inside your home more efficiently so you can relax in a well-organised and beautiful atmosphere.

The Brand

Native designs can transform your interior space into something remarkable with original, handmade products that are artistically stunning and designed just for you.

We can transform your home environment so it maximises your physical and mental health, through biophilic systems and furnishings that are created locally, without any toxic chemical exposure.

What is the process for Co-creation at Native Designs?

We meet face to face with our clients to hear their stories, understand their needs and share our ideas. I record the ideas by sketching, taking photos and writing notes. Then I create prototypes and textile design samples tailored to individual needs.

The client's ideas and needs are the focus of my design approach. My engagement with the client is crucial to understand and lead them toward the design and creation of the end product. I design and build beautiful items which are of high quality and utilise materials developed through sustainable practices. 'Native Designs' have that special something that makes you feel inspired, nurtured and content in your home. To ensure client's will be happy with the outcome I show samples, where appropriate suggest alternatives and obtain feedback along the way, as we co-create. That way changes can be made easily after samples and prototypes have been viewed. This system ensures the end product is the best fit for the client, aesthetically and functionally.

The principles of the United Nations underpin every aspect of 'Native Designs'. I operate with integrity and compassion to ensure the "support, respect and protection of internationally proclaimed human rights;" and make certain that I don't conduct any business, through my whole supply chain, that involves any human rights abuse.

I have made it my business to support vulnerable workers and their communities in the third-world who are victims of the fast fashion and textile industry. I do this by supporting the initiatives of UNICEF and Doctors without Borders who both have interventions in place to assist these vulnerable people.

Artist Statement

My designs are a celebration of the natural elements found in our local environment. I believe that time spent outside engaging with nature in a mindful and reflective way nurtures our connection to the whole planet, and increases the likelihood that we will take action to protect it for future generations. I keep a strong focus on sustainable practice in my design process, and believe that as designers we are in a unique position to generate solutions that fight climate change through clever sustainable designs.

I adore the bush environment behind my home which is full of gum trees, rocks and kangaroos. I like to paint gum leaf designs on textiles and experiment with watercolour illustration. My products are made with slow, sustainable practices that reject the environmentally damaging models of fast global production, where poor-quality items are mass produced and sold to consumers, who use them for a short time then dispose of them quickly to buy new items from the next micro trend. This wasteful linear model of fast manufacturing, teamed with our increasing levels of consumption is an environmental nightmare which cannot be sustained.

I hope people are willing to embrace the raw beauty of imperfect, handmade products like mine. I value imperfection so much that I intentionally include this element in all my designs to symbolise the human frailties we all share. Perfectionism is a trap that can cause unnecessary stress and anxiety through unreasonable expectations.

My products haven't been made in faraway factories that leach toxins into natural waterways, deplete natural resources and exploit the human rights of its workers. Instead, they have been nurtured by human hands and loved by a human heart. They offer something wholesome, refreshing, and safe to replace the ugly, mass-produced items that can carry a toxic, chemical residue into our homes.

Design Brief

To design interior space solutions for a client with a large family who needs additional spaces for studying and working from home due to covid-19 restrictions. The client will continue to work from home after the pandemic ends so she needs a permanent, private office space. In addition to her permanent office, she requires extra temporary space solutions for two students and two adults to work from home until the present restrictions ease. She doesn't want any permanent structural changes to her home and would like the four temporary spaces to be located in her large open plan, family room. It is important to her that the temporary space structure is portable, light and can be packed away easily if required.

Notes from Client Meeting

The homeowner is unwell and suffers from upper respiratory illness.

The temporary spaces can be close together as the occupants don't need private spaces for their work. The purpose of the temporary spaces is to provide each person with a designated space so they feel like they have a personal refuge to work in, and keep track of their equipment by storing it in their personal area. The client has two small camping tables for each of the students to use as desks, and two longer, foldable tables for the adults to work on.

The client requires a funky stool upcycle, to use at her desk during zoom meetings. She works in a creative area and finds her black leather ergonomic chair too big and unattractive for use during certain online meetings. She hides her large black chair in her walk-in wardrobe and uses a timber stool instead. She would like the stool upcycled to a more modern and funky style.

She is agreeable to using a hybrid office in her bedroom but works late at night when her husband sleeps. He doesn't mind her working while he sleeps but prefers her to use a lamp rather than the overhead light.

The client has a vintage lamp stand but would like some new lamp shades for it.

Her budget is generous.

She wants her office to look beautiful and to match her new blue quilt cover. She is happy for me to move the furniture around in her house as required.

Customer Order:

- Create a permanent, hybrid office space using a biophilic system
- Build a water feature for the hybrid office
- Design a vertical garden for stage two of the office design
- Upcycle a large mirror as a moss garden to provide a great background for the client's professional zoom meetings
- Upcycle a wooden stool
- Hand Make two original lamp shades
- Design a solution to create four temporary office spaces in the family room

My Design Process

Define

1. Design a hybrid office space for the client in her bedroom. She would like to have her wooden stool upcycled and to purchase two new lamp shades for her base. She wants to feel uplifted by the space. She is unwell and feels flat at times.

2. Design a portable, light structure that creates four temporary work spaces to house two long and two short tables.

Ideate

Sustainable practices are essential - Furniture designer Philip Ross grew a fungi chair. This is an example of sustainably produced furniture which is highly biodegradable.

Research - chemically safe, sustainable materials for the project which have been evaluated against a suitable criterion. GOTS or OEKO-TEX certifications are reliable.

Hybrid office:

Biophilic design to promote the client's sense of well-being.

Research: NASA found that certain plant systems can remove high concentrations of indoor air pollutants such as "cigarette smoke, organic solvents, and possibly radon." These plants clean large volumes of contaminated air, then "destroy the pathogenic viruses, bacteria, and the organic chemicals, eventually converting all of these air pollutants into new plant tissue." The suitable plants from the list available in Canberra were the spider plant, palms and mothers-in-law's tongue. You will see these plants in the photographs I took of the hybrid office space.

Turn the desk to the large window for natural sunlight and an amazing view of Brindabella Mountains.

Recommend the lady increase her gardens and plants outside in close proximity to the house.

Add plants that clean toxins from the air, and suggest to the lady that she ventilates her house with fresh air daily.

Use a nature theme for artwork on lamp shades.

The client loves flowers and palms.

Source raw materials that are certified organic to minimise her exposure to chemicals and reduce upper respiratory symptoms.

Suggest eye-mask for husband to use at night.

Plan zoom background appropriately for her online meetings. Upcycle the existing mirror to create a moss sculpture. Use artificial moss so water doesn't damage the wall.

Teal and white colour scheme with a small touch of red to create a positive mood. Include gold accents because this is the client's favourite colour. Use neutral earthy tones where required to give a natural feel to the space.

This colour scheme matches the new quilt cover and existing decor of the room. It also works well with biophilic design approach.

Consider biophilic design elements of water, stone, wood and nature.

Temporary work spaces:

Consider folding screens to designate spaces.

Concertina for ease of use.

Flexible space designs to increase usability of product – consider what other spaces can be created with the screens and how they can be used.

Fabric cover – organically certified GOTS or OEKO-TEX

Organic hemp is considered a **carbon negative raw material**. It actually *absorbs* CO2 from the atmosphere.

Research: For the last decade, the textile research group from the University of the Arts London TED have been collecting information to assist designers with sustainable textile choices. They have made a resource to help textile designers take responsibility for sustainable practices. It is called the TED's 10. It is a great resource for sustainable design.

Sustainable and 3rd party certified organic material only to ensure her health condition isn't irritated by chemical residue on materials.

Lamp covers or jackets to cover shade, she can change it without buying more shades

Design a calming water feature for the client's office/bedroom.

Design a vertical garden on the right side of the room on wall space beside the window, and next to the desk.

Convert the large round mirror on her chest of draws to a moss art piece. It is the main element visible in her zoom background.

Prototyping

Hybrid office:

Make a fabric lamp shade in 100% GOTS certified organic fabric with neutral leaf print fabric.

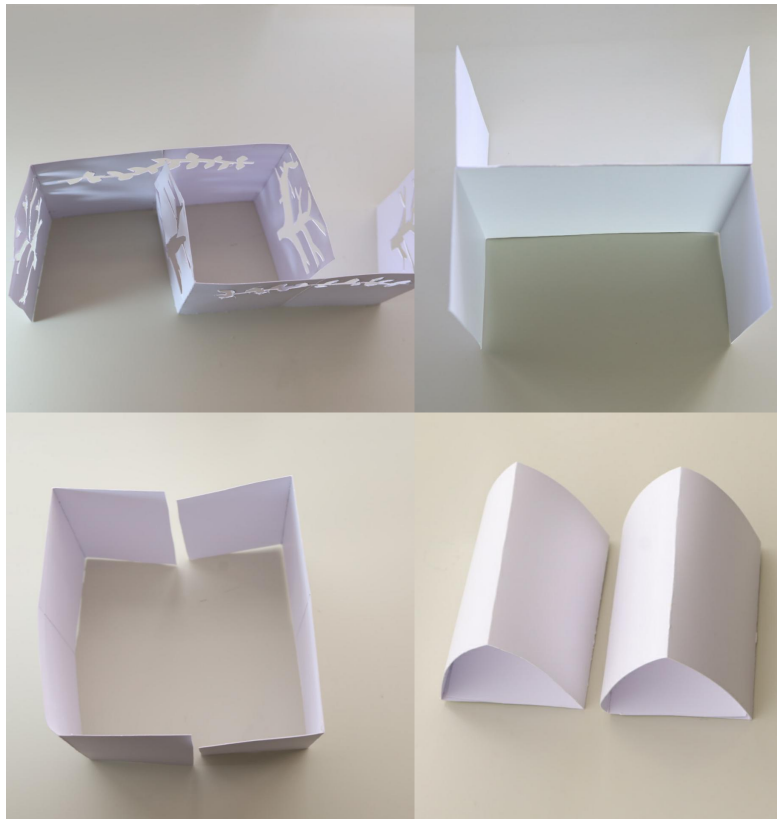
Paint botanical design on lamp shade.

Build water feature from recycled materials – pot plant, log and stones. Purchase a new pump.

Sketch moss art designs for mirror conversion

Temporary Spaces:

- Measure tables and plan family room space available for this area.
- Sketch various quick screen design configurations.
- Make cardboard models of designs.
- Make a model of screen that retracts into base for ease of storage.
- Create floral designs for hand painting a lampshade.
- Consult with client to see which ideas she prefers.



The image above shows four different temporary spaces which can be created with the two screens. Top left: 2x study nooks with centre storage area. Top right: design requested by client, two long tables are housed in the long areas that are adjacent to each other for the adults to work, and the shorter tables are positioned on each end for the students to study. Bottom left: a single space for a mattress and private sleeping area. Bottom right: the screens can be used as cubby houses for the client's grandchildren to play.

Build

Upcycle Stool – sand and repaint wooden legs with non-toxic paint. Add the sheep skin, cushioned seat to the top of the stool.

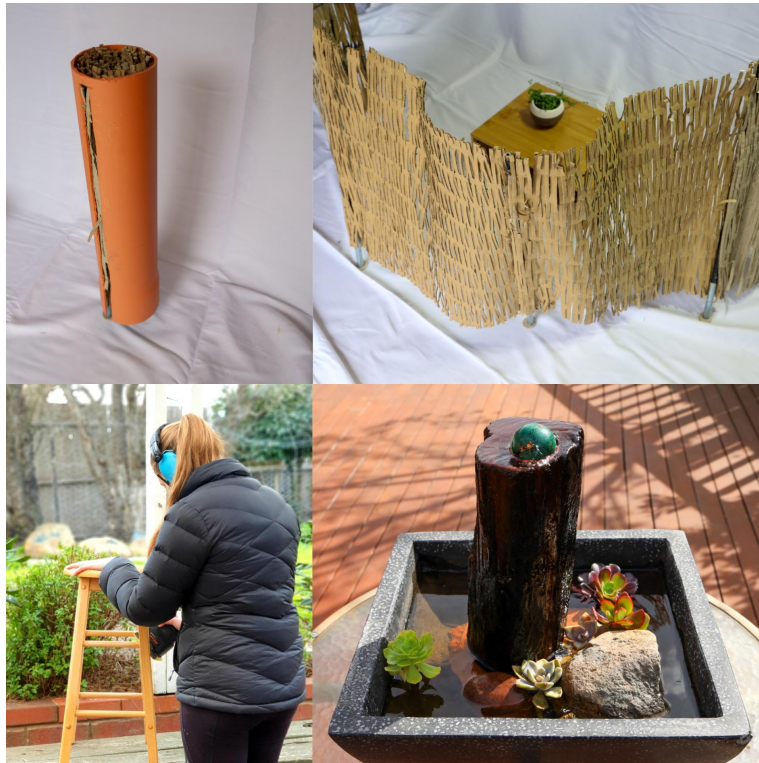
Create a pattern on the wooden legs of the stool like the texture of bark. To achieve sand the timber with a power sander and paint it a coral colour with non-toxic paint. After, this is dry, painted over the top in teal blue which matches the client's doona colour. To create the bark pattern, sanded sections of the wood to expose the coral colour underneath.

Paint lamp shade in botanical design:

The lamp shade fabric is slightly textured which created an interesting look to painted flowers. I included a lot of green to highlight the red flowers, and match the plants in the room.

I made a second fabric lamp shade from scratch. I covered the frame in a 100% organic cotton fabric that is GOTS certified. I chose a fern design in a neutral colour so it doesn't clash with any other patterned elements in the room. The client likes ferns and has several ferns in pots in her home. I have designed a lamp covered which has elastic added to the edge of the fabric so it can be removed and changed easily

Construct water feature with a hose, pump, hollow log, stones and pot plant. Fill hole in the pot plant and test for leakage. Tweak water flow until it makes a nice sound.



The top left image shows the retractable screen within the storage cylinder. The image top right demonstrates the screen deployed (the screen legs can be positioned to create the desired space and shape). Bottom right image is the completed water feature created from recycled materials, the main feature is the water cascading down a piece of hollow limbe hardwood tree branch.

Exhibit/Evaluate

Set up hybrid office according to biophilic system.

Set up the two screens to create the four temporary work spaces.

Demonstrate how other spaces can be created with the two screens and provide the client with a diagram for future reference.

Demonstrate how the water feature operates.

Evaluation notes:

Co-creating with the client through regular meetings is a worthwhile approach to use again.

Wool scores low on the Higgs index as a sustainable textile choice but this is not always accurate. I found a highly sustainable source for woollen fleece that is produced locally on a regenerative farm that maintains a positive carbon footprint. The sheep are kept humanely on a ridge of land that isn't suitable for food crops. The farm is organic and uses no chemicals. I have been to the farm on several occasions to verify its sustainable practices.

