CATALOGUE 2019

DESIGN AND INNOVATION STUDENT EXHIBITION

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INTRODUCTION

The Open University celebrates its 50th anniversary this year. Design has been taught at the Open University from the beginning, and since 2010, we have been offering a degree in Design and Innovation which enables students to combine design studies with complementary subjects from other disciplines towards either a BA or a BSc. Around 2000 students each year are studying design at the OU.

Design is, conventionally, taught through studio practice and hands on work and the challenge for the OU was how to teach design to students in their own homes and workplaces. The result is a unique approach to design learning which focuses on developing students' abilities to identify and solve problems and to use design thinking in a wide range of situations. From the beginning our modules have also had a strong emphasis on sustainability, user centred design and design for social good. Like any other design school, assessment of learning is based on project work, resulting in the work that you see in this exhibition.

Design at the OU has also always been at the forefront of innovations in teaching delivery, using opportunities that new technologies have presented to develop new ways to help students to learn and interact. Our students now use an online studio space, OpenDesignStudio, in which they can share and comment on each other's work and curate their portfolio of design work.

If you would like to know more about the Design and Innovation degree at the Open University, you can find out more by visiting the OU prospectus at:

http://www.open.ac.uk/courses/qualifications/q61

Overall winner - Most innovative idea

Rebecca McFleat

T317

WC-Sphere - Product design

The jury selected Rebecca's work as the overall winner because of the innovative and well-communicated idea presented and how Rebecca tackled the difficult problem of sustainable human waste disposal in a thorough yet creative way.

The design for a human waste disposal unit that improves on hygiene through an automated flush system makes clever use of body weight to automate the flush system and removes the need for a separate flushing mechanism.

This is a complete redesign of the traditional shape and structure of a toilet for the flush system to work and enables a rethink of the traditional form of the toilet.

Consideration has been given to sustainable materials and the user experience and offers a complex and well realised design that has potential for development.

The visual detail and information in the poster communicate a sophisticated thought process and unique idea.

Looking at an alternative approach to human waste disposal in an effort to improve user experience, hygiene, learnability and sustainability of bathrooms in domestic households.

WC-SPHERE

human waste disposal unit

- **WC-Sphere** is designed to help improve bathroom hygiene and make cleaning easier. It has an automatic rinse action activated by the users' body weight. This will require no additional interaction from the user making it a relatively hands free interaction reducing the spread of germs and bacteria due to toilet spray or physical contact.
- This design incorporates 'LiquiGlide' technology making all surfaces extremely smooth and will allow any soiling to move down the inner walls and through the waste pipe opening without leaving any residue.
- The body will be constructed of moulded ecoplastics. The outer body will also be coated with 'LiquiGlide' and with its smooth minimalist shape will be very easy to simply wipe clean; no fussy pipe work or fiddly hinges to navigate.
- With the user group of this project being refined to family it is important that this design is suitable for easy use and cleaning for hygienic reasons. The reduced complexity of this task will also aid children in toilet training and those with disabilities.
- It is also intended for this design to fulfil a more sustainable and more considered perspective. The **WC-Sphere** will help to simplify a growing race for technology for technologies sake. By focusing on the practical use of this domestic product this concept is striving for user centred design and sustainable innovation at its core.

How the water will move:

Normal position: water stored in cavity space currently sealed by flexible barrier. Overflow gap open.

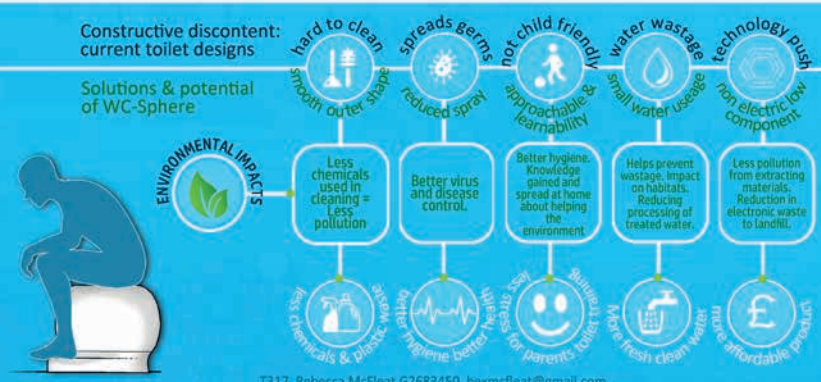
Pressure applied to top forces inner sides to overlap reducing the cavity space and displacing water into a small upper shelf.

Releasing pressure allows the original form to be restored reducing the size of the shelf and re-opening the overflow gap.

As the form is restored the water held in the small shelf is forced to overflow gently covering the entire bowl evenly.

Constructive discontent: current toilet designs

Solutions & potential of WC-Sphere



T317 Rebecca McFleat G2683450 bexmcfleat@gmail.com

Winner - Level 3

Audrey Buchan

T317

Cocoon - Inflatable insulating Jacket

The jury selected Audrey's design concept as the winner because it showed a strong awareness of current developments in materials to combat issues of sustainability through low impact design.

The idea creatively explores the use of new sustainable materials as an alternative to the current materials used in similar products, micro fibres, that are adding to the pollution issues.

Use of the latest research for growing textile fibres has been cleverly considered by using mushroom leather alongside a simple unobtrusive method for achieving the insulation. Further ideas are also environmentally aware through the aesthetics of the jacket which use natural dyes and textures.

The idea for a 'blow up' jacket allows the wearer to control how insulating the jacket is when worn and is inventive, creative and forward thinking in a fast fashion market that is saturated with waste products.

cocoon

inflatable insulating jacket

the sustainable alternative to synthetic fleece

Problem context: microfibre pollution

- Synthetic fleece fabric made from non-biodegradable plastic.
- Tiny microfibres shed during fleece manufacture, washing, disposal.
- Microfibres in wastewater and landfill run-off pollute waterways.
- Marine animals consume microfibres, often fatally.
- Humans consume microfibres in seafood, water, salt, beer.

- Insulates the body using air
- Made from sustainable natural materials
- Fully biodegradable under natural conditions

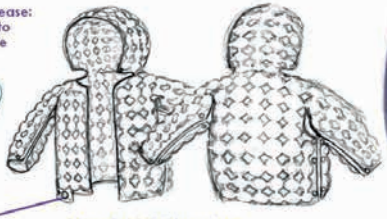
Jacket outer made from mushroom-derived leather. Can be grown to desired size and shape.

Dyed using pigment-forming bacteria. Requires no harmful chemicals.

Unique 'embossed' patterns on outer textile inspired by nature.

Connected bladder cells inflate to prevent body heat loss through convection or conduction.

Air release: press to deflate



Air pump button on waistband: push to inflate bladder to desired level

User-customisable insulation suits every environment.

Internal air bladder system

Made from PHB biopolymer synthesised by bacteria using waste methane. Fits between jacket outer and lining. Removable for repair – patch kit included.

Audrey Buchan – B6644389 – T317 countchocula@hotmail.co.uk

Joint winner - Level 2

Claire Lambert

T217

Inn-vert-ed - An inclusive, multi-sensory experience design

The jury selected this design as a joint winner because Claire has created an inclusive design concept that addresses the social, physical and psychological needs of a wide range of users to improve experiences of visits to a National Park.

This multi-sensory experience is intended to address issues of inclusivity for visitors to a National Trust SSSI at Ditchling Beacon.

This site is a natural protected open space with wildlife, flora and fauna that are protected. Ditchling Beacon is also the site of an iron age fort so has historical significance. With sweeping views over the countryside and varying terrain, it is a popular site for walking and experiencing nature.

The design takes a multi-sensory approach to providing an inclusive experience through touch, smell and visual stimulation while educating users about the site.

The design integrates effectively into the environment without imposing on it and has been beautifully illustrated.


The Brief
Human Centred
Inclusive for those with physical
and sensory disabilities
'Hands On' Fun to use
Fostering a sense of connection with nature
Acknowledging the history of the site
Engages missing users
Made from natural materials
with zero waste at the end of its life
Easy to maintain
INN-VERT-ED
Innovation: Inclusive, green, educational, social
Design
The Design
An accessible, sensory experience
at Ditchling Beacon.
Visitors can get up close to nature, experiencin
'barefoot' walkway that weaves around the Sou
Downs Way, alongside a wheelchair friendly pa
way with 'barehand' boards.
The Iron Age round house is the ideal play hou
and introduction to sustainable building materi
(getting their hands dirty by weaving their ow
wattle wall and throwing some mud at it!) whi
nodding to the historical importance of the sit
All leading to the Hillfort viewing platform
and stunning 360 degree views across
Sussex and the
English Channel.
Sustainable Design At Ditchling Beacon; Engaging Missing Users
Claire Lambert Y1336576 T217 2017/18 clairelambert@outlook.com

Joint winner - Level 2

Barry Coughlan

T217

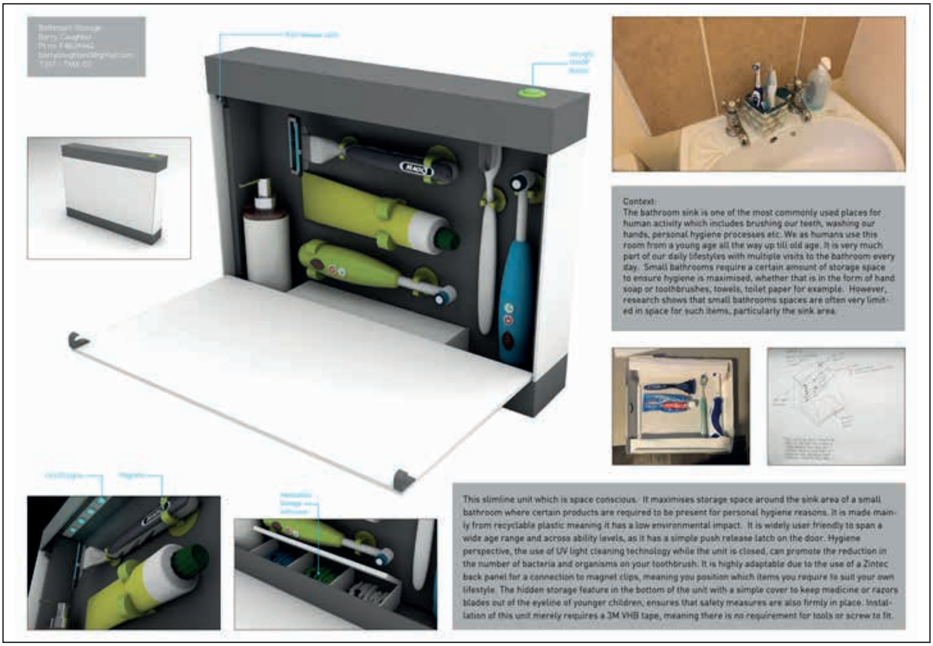
The 'Slimline Bathroom Storage Unit'

The jury selected this idea as a joint winner because this is a simple and effective solution which is both inventive and sophisticated and very well communicated.

Developed following research into the issues of limited space around sinks in small bathrooms, for storing essential items and products, this slimline storage unit is sleek and unobtrusive and removes the need for a flat surface on which to place products or a larger storage cabinet.

The design provides a more context appropriate solution to storage for small bathrooms and addresses safety issues by enabling items such as medicines and razor blades to be concealed from children in a hidden drawer.

The ease of fitting the unit has been considered and hygiene is addressed through easy to clean surfaces and the simple aesthetic allows the unit to fit into a wide range of bathroom styles.


Context:
The bathroom sink is one of the most commonly used places for human activity which includes brushing our teeth, washing our hands, personal hygiene processes etc. We as humans use this room from a young age all the way up till old age. It is very much part of our daily lifestyles with multiple visits to the bathroom every day. Small bathrooms require a certain amount of storage space to ensure hygiene is maximised, whether that is in the form of hand soap or toothbrushes, towels, toilet paper for example. However, research shows that small bathrooms spaces are often very limited in space for such items, particularly the sink area.
This slimline unit which is space conscious. It maximises storage space around the sink area of a small bathroom where certain products are required to be present for personal hygiene reasons. It is made mainly from recyclable plastic meaning it has a low environmental impact. It is widely user friendly to span a wide age range and across ability levels, as it has a simple push release latch on the door. Hygiene perspective, the use of UV light cleaning technology while the unit is closed, can promote the reduction in the number of bacteria and organisms on your toothbrush. It is highly adaptable due to the use of a Zintec back panel for a connection to magnet clips, meaning you position which items you require to suit your own lifestyle. The hidden storage feature in the bottom of the unit with a simple cover to keep medicine or razors blades out of the eyeline of younger children, ensures that safety measures are also firmly in place. Installation of this unit merely requires a 3M VHB tape, meaning there is no requirement for tools or screw to fit.

Sam Bowes

U101

Recycling Dog Waste into Bio Gas and Compost' System Design

Winner - Level 1

The jury selected this poster as the winner because Sam was able to produce an overall concept that addressed environmental issues from several angles on what is a challenging subject and communicated this very effectively through physical prototyping.

The purpose of this project was to select an existing issue and design a potential solution through rough prototyping.

The prototype idea that has been selected is an age-old problem of dog waste disposal into landfill from dog waste facilities and bins. Additionally, the current issue of the need for sustainable energy has paved the way for this inspirational idea for an alternative, renewable, source.

The idea of collecting dog waste material in specifically designated bioplastic bins utilizes household waste disposal systems maximizing current systems whilst avoiding problems with single use plastic.

This winning idea is communicated through a simple prototype that effectively communicates how the way this system could work.

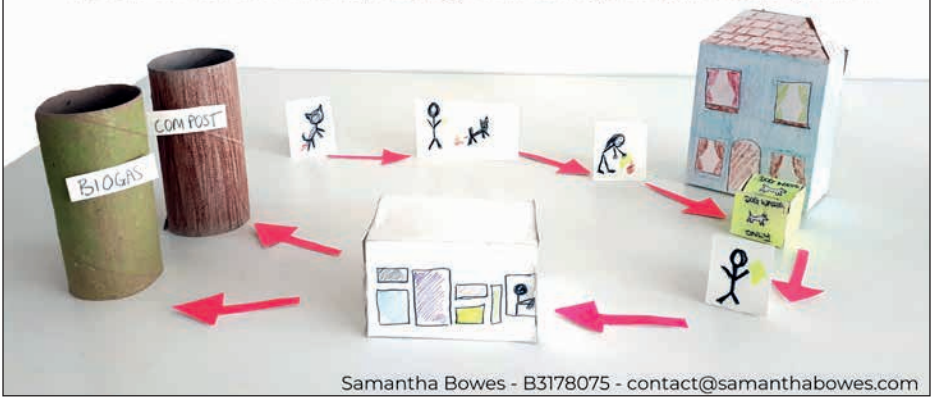
For U101 - TMA 02 the task was to explore a design problem, frame it and design a prototype as a proposed solution.

As a lifelong dog owner, I used to wonder, what happened to all the dog waste? Through my research during TMA 02, I discovered that this was being sent to landfill. Through problem framing, I began to explore ideas on how dog waste could be encompassed into a resource instead of going to landfill through the creation of a product & a system using a circular economy.

This is a my design concept for a product & system that addresses my problem frame of "Reimagine a system that reduces the amount of dog waste that ultimately ends up in landfill."

My proposed design solution was to incorporate a designated national bin and bag system, for dog waste only. The dog waste bin itself being made of a bioplastic, with compostable bags. The system would compose of a brightly coloured home bin and bags, so that people can correlate the waste to the correct bin. The waste in bins would then be collected at the same time as other recycling collections, where it would be sent to an industrial composter to kill off harmful bacteria and to produce compost or to be turned into bio-gas for energy production.

The design solution, is intended to be operated daily at the bin level, and weekly with recycling collections. The proposed solution would be for all homeowners with dogs, accomodating this new system, where bags and bins could be provided by local councils for free or for a minimal cost, to encourage a circular economy and to stop the waste going to landfill.



Samantha Bowes - B3178075 - contact@samanthabowes.com

Highly commended

Andrew Larsen

T317

Barracozi - Festival Chair

This prototype design for a portable festival chair is commended by the jury because Andrew has been imaginative in adapting a product to give it more options for use and has styled the aesthetic to give it greater market appeal.

The current issue of abandoned tents and chairs at festivals is adding to the growing mountain of unnecessary waste products that needs to be resolved.

The idea for this multi-purpose product is to encourage longevity of use and lessen the likelihood of it being left behind as a single use item before its end of life and impacting on landfill.

The development of the design taken from the archetypal picnic chair gives it greater functionality, addresses issues of strength and safety and explores its aesthetic appeal both through its shape and form and through its decorative appeal.

This clever design goes beyond its original purpose of a portable chair, functioning also as a sleeping mat and picnic rug and is a viable solution which could be used in number of contexts.

There is a need to increase the mechanical integrity of camping chairs used at music festivals, together with user value, so that they can become regarded as a must take home item.

Andrew Larsen T217 PI:F2170878

BARRACOZI

andrewlarsen@hotmail.co.uk

BARRACOZI offers high levels of comfort, protection and is highly adaptable. Its self inflating sleep met technology enables it to provide a comfortable mattress, a waterproof picnic rug, a load cover and a highly effective chair, dematerialising the liesure market.

Why is BARRACOZI better?

- There arevery few mechanical components
- It is very strong and extremely stable
- It is virtually unbreakable
- Materials used are UV stable
- It is easily customised to suit user values

How does BARRACOZI have a positive effect on the environment?

- It is light weight so reduces environmental cost of transportation over traditional models
- It is responsibly manufactured with low material wastage (Designed around fabric stock sizes)
- Cottage industry manufacture facilitates low product miles
- It can be incorporated into ISO 20121 2012 Sustainable Festivals
- It is repairable and used environmentally responsible materials

POTENTIAL MARKETS FOR PRODUCT DIFFUSION

Highly commended

Denise Mummery

T217

Fun to Learn - Interactive Education Boards for Children

The jury selected Denise's idea for these interactive learning boards because of the creative approach to the design of the boards that will both engage and educate children in the environment in which they will be used.

The idea applies effective use of vibrant colours and shapes that reflect the surrounding environment and which will appeal to children encouraging them to engage with the boards and learn about their surroundings.

Building on current methods used in museums for interactive learning boards and exhibits, the design creatively explores the use of visual and audio methods that appeal to children.

The board designs are thoughtful in addressing wider issues such as pollution and littering as well as educating on the flora and fauna of the setting. They enhance the user experience of national parks by encouraging children to apply their learning in the context of the park and further afield.

FunToLearn

Explore the outdoors

4 Interactive learning boards aimed at children:

Board 1:
- Plastic Pollution
- Taking your litter home

Board 2:
- Animals
- Bugs
- Birds

Board 3:
- The Water Cycle
- Your Carbon Footprint

Board 4:
- Conservation
- Sustainability
- Recycling

Ages 4 and older

This nature inspired exhibit is to help young people learn all about the outdoors and just before they embark on an adventure with the family.The boards would be located at the foot of the mountains in a National Park, or at the entrance of a popular nature trail and reserve.

Its interactive features are designed to attract young visitors and hopes to instill basic and vital environmental knowledge taught to them through some fun recordings that is activated via a big red button and a single speaker that are positioned on the interactive leaf-shaped board.

Topics include: wildlife, habitats, animals, bugs and birds, advice on taking care of the natural world and helping to preserve the beautiful outdoors.

FunToLearn ~ Denise Mummery ~ F2625286 ~ T217 TMA04 ~

Highly commended

Patrice Belton

U101

Let's Make Vis'tory - Road Safety for Cyclists

The jury commended the complex exploration, thought process and ideas produced by Patrice which show design ideas based on good research, communicated in a well-balanced poster.

Each stage of Patrice's design process is communicated in this commended poster. The initial problem is how to keep cyclists safe on the roads with other traffic and ensure greater awareness and protection against accidents.

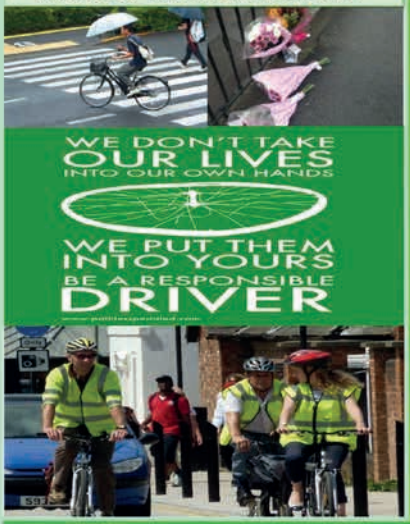
The range of ideas explored shows both logical and innovative thinking and addresses both the individual and wider legislative responsibilities that could be developed through campaigns, improvements to the highway code, mirror systems, visibility clothing and cycle friendly road layouts.

The solution proposed has been refined to bring together several of these ideas to redesign the way that cycling is addressed within our society. The visual communication and balance of this, with the use of catchy slogans and visuals in the design engages the viewer.

LET'S MAKE VIS'TORY!!

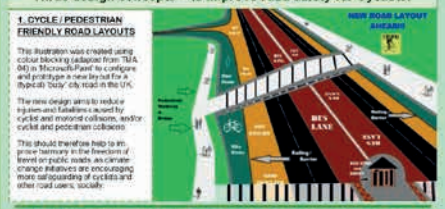
1. Framing the problem

'Road safety' challenges for Cyclists!



2. Concepts - generating ideas

Three design concepts – to improve road safety for Cyclists!



3. Proposal - A practical and legislative design

1. New Highway Code amendments:

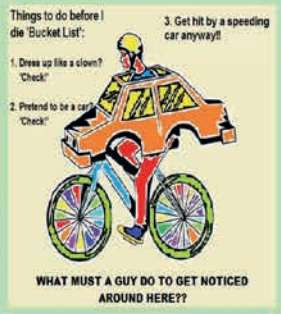
1. Overview (59 to 71)

These rules are in addition to those in the following sections, which apply to all vehicles (except those in the motorway section). See also You and your bicycle.

59b Clothing: You should wear:

- Experience appropriate 'high-visibility jackets', must be worn at all times, when using bicycles on public roads (see also **'Law BIKE reg: 5, 10, 15')**

{(Law BIKE reg: 5, 10, 15: *(All (public road) cyclists must undergo [a standardised] compulsory basic bicycle training (CBBT) and obtain certification to clarify level of experience; cyclists must also wear compulsory colour-coded Hi-Vis jackets during road use and learner (L) plates where necessary.)}}*



2. HI-VIS COLOUR-CODING:

Neon-**RED** = High Risk / Learner Riders
Neon-**ORANGE** = Cautionary Risk / Intermediate Riders
Neon-**BLUE** = Reduced Risk / Experience Riders

3. SAFETY CAMPAIGNS AND SOCIAL MEDIA BLOGS:

Using social platforms (e.g. Facebook, Twitter etc.) to engage with cyclists, families and road users, to share critical dialog, spread awareness and champion road safety.

Silce Pannie Belton (C8014928) - sobelton@outlook.com
U101 - TMA01 / EMA
Title: Let's Make Vis'tory!

U101 - Design thinking

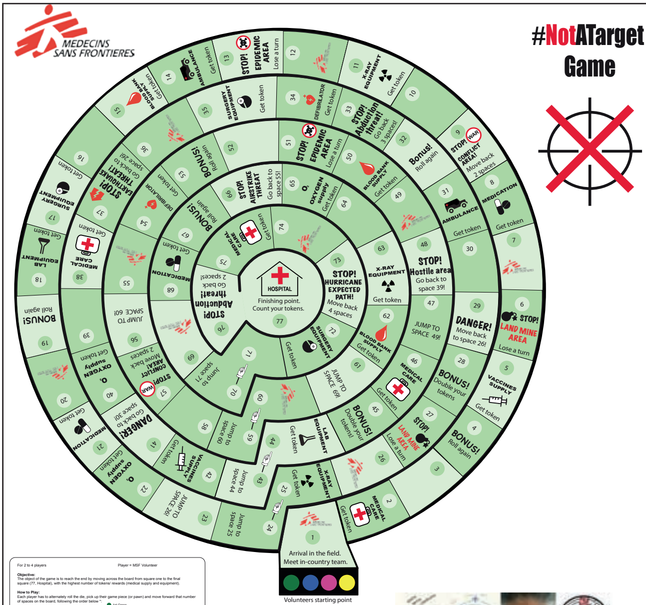
U101 is the starting point for the Design and Innovation degree at the Open University. This first level module develops students' capacity to finding and solving complex problems with creative design solutions. The module is presented online, each of the four blocks of study correspond to the different levels at which design thinking can have an impact on our lives: individual, group, social and global. Through a mix of academic and practical work students develop an understanding of design, acquire design skills and build a portfolio of design work in response to set projects. The work shown in this exhibition presents the outcomes of some of the projects that students are asked to engage in during their first year of study

Elenice De Faria Elmi

U101

Not A Target Game

This board game is based on the work of the Medecins Sans Frontieres organization. The content of the game relates to the demands faced by the doctors who work for the organisation as well as the challenges presented by the physical and political contexts in which they work.



For 2 to 4 players Player = MSF Volunteer

Objective:
The object of the game is to reach the end by moving across the board from square one to the final square (77, Hospital), with the highest number of tokens/ rewards (medical supply and equipment).

How to Play:
Each player has to alternately roll the die, pick up their game piece (or pawn) and move forward that number of spaces on the board, following the order below *:

- 1st Green
- 2nd Blue
- 3rd Pink
- 4th Yellow

All players must get to the centre of the board and compare their total of tokens, wins the one with the highest number. If 2 or more players have the same amount of tokens, wins the one who got to the centre of the board (Hospital) first.

* Unless stated by the board.

Important Note:
Players can only collect token or penalty if pawn lands on that specific space.
Players can only move forward on the numbered pathway unless stated by the board.

Title of the work: Not A Target Game
Designer name: Elenice De Faria Elmi, PI F6112561
Module: U101-2017
Description:

The assessment required me to design a game from the choice of any profession. I chose “doctors” and subsequently, the humanitarian aid organisation Doctors Without Borders came to my mind. After researching DWB, I found out about their Not A Target campaign that raises awareness about the severe impact of illegal and often violent acts that obstruct the delivery of health care in conflict areas. Despite the sensitive topic, I thought a real-life hero the perfect concept for an educational game.

During the concept design, the words brain and maze worked as the idea generators - because of my associative thinking to a brain surgeon - then, I sketched the game board layout with a shape that resembled those two elements.

Later, I understood I would had to change the direction of my creative process because I wanted the board design to be associated with a shooting target (symbol of the DWB campaign). Besides the visual aspect, I wanted to incorporate real challenges faced by the humanitarian workers into the game mechanics. This iterative process led my choices until I reached the final design (main image above).

The game is played by 2-4 players (doctors) with the task of collecting as many tokens (medical supply) as possible, overcoming threats (airstrikes, epidemic areas, land mines etc.) and delivering those tokens to the Hospital located at the centre of the board.

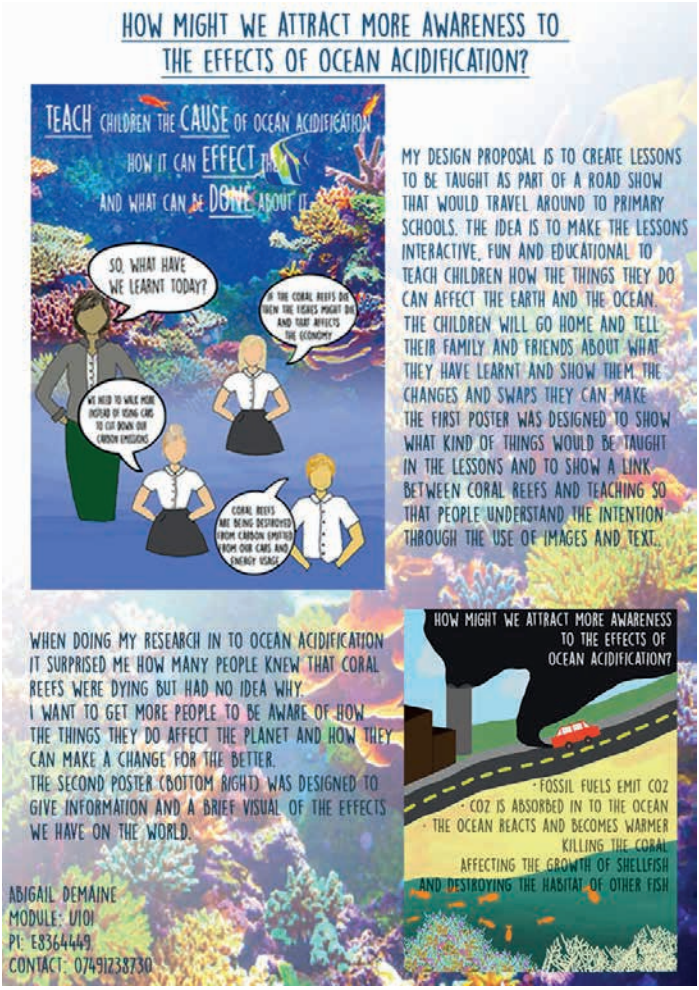
I truly believed in my design and that gave me the courage to contact DWB in the UK and offer this idea to them.
I was delighted to learn that DWB will use the game as a marketing product to be presented in their sponsor’s events.

Abigail Demaine

U101

How might we attract more awareness to the effects of ocean acidification?

This design concept takes the environment as its focal point. It provides interactive, fun and educational lessons to primary school children so that they can learn how the things they do affect the Earth and the ocean.



Anna Campbell

U101

Mindful Maps – one stop away from feeling your best

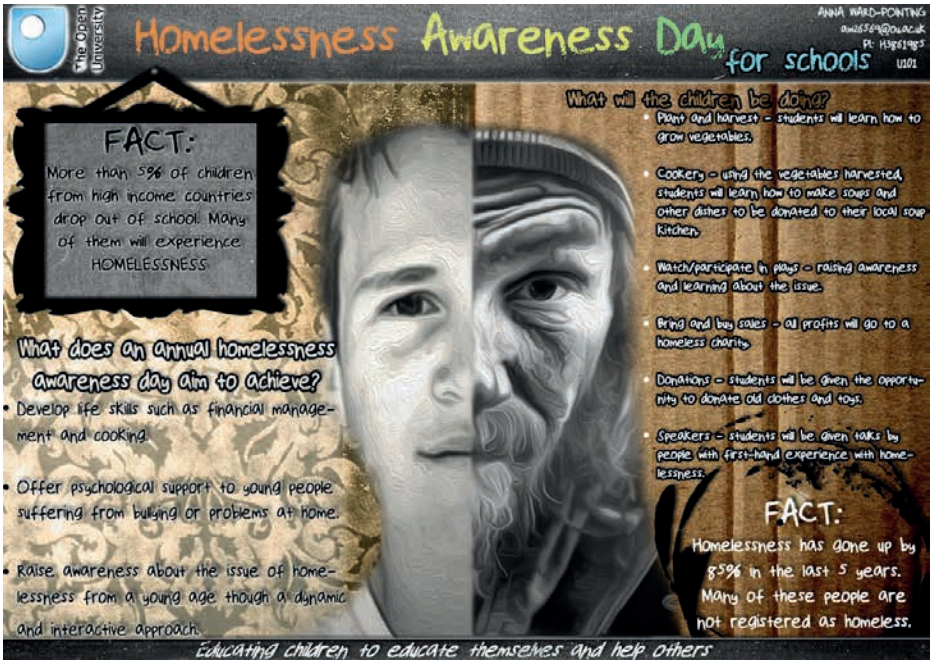
This design proposal is for a smartphone app which aims to make emotional health accessible and affordable. It encourages users to take digital breaks and participate in activity to improve their well-being. It works with a user's journey planning app to make suggestions for locations and services nearby considering time constraints and budget.

Anna Ward Pointing

U101

Homelessness Awareness Day for schools

This design proposal addresses the problem of homelessness. Through a Homelessness Awareness Day for schools, children are educated about the extent of the problem by taking part in a variety of activities.



Eleanor Marsh

U101

apparel – Your wardrobe in the palm of your hand

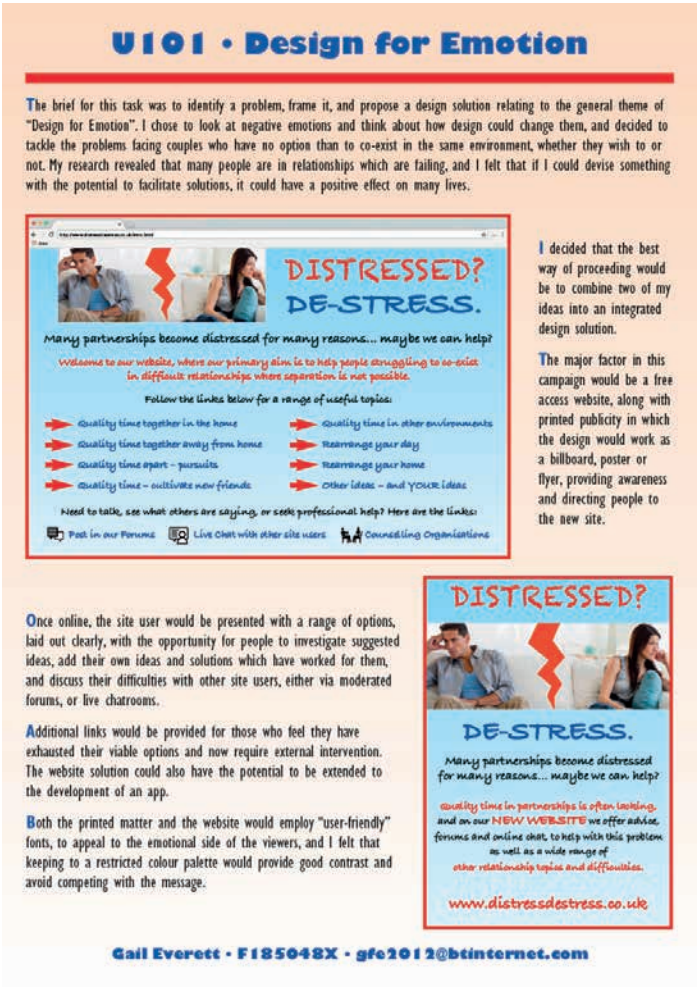
In this design, users can see and select their clothes in a virtual environment. It enables more efficient storage of clothes as not all garments need to be visible. It also allows for sharing between friends and benefits people who might find trying on clothes difficult for mobility reasons.

Gail Everett

U101

Distressed? De-stress - Design for emotion

In this design, a publicity campaign supported by a website provides resources for couples who are in a failing relationship but need to live together. The website allows the sharing of ideas and experiences through curated content and gives access to moderated forums and live chatrooms, and also links to relevant counselling organisations.

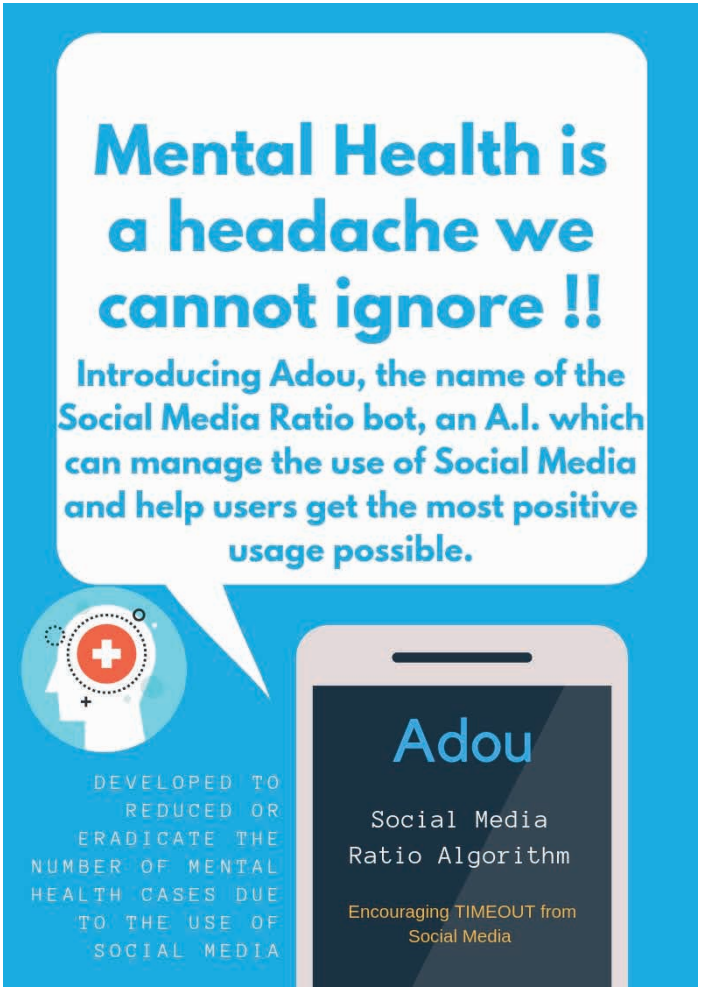


Hashim Ruan

U101

Mental health is a headache we cannot ignore

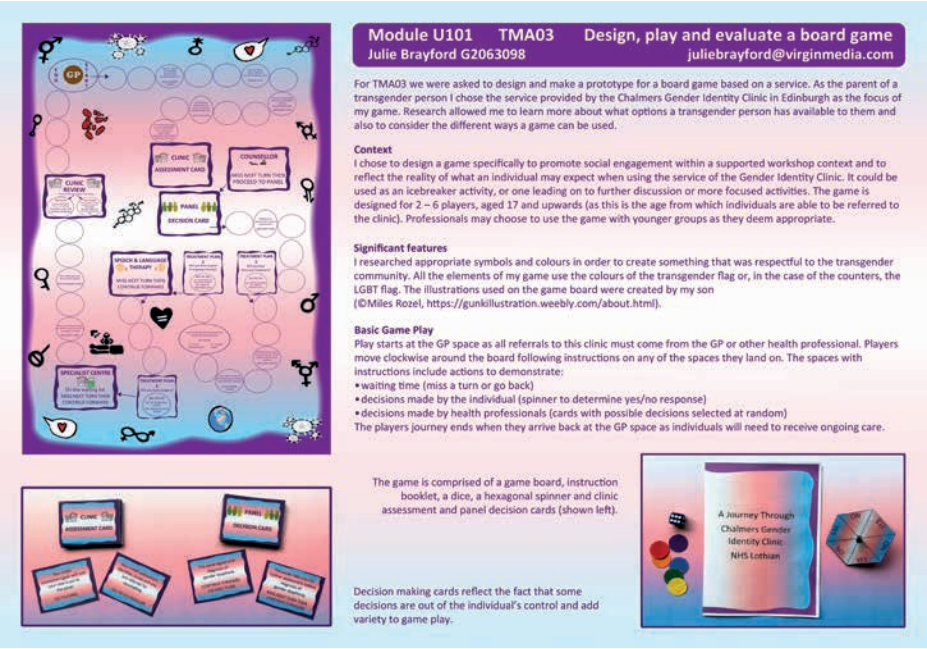
Social Media use can negatively impact on mental health. An Artificial Intelligence supported design is proposed to manage users' engagement with Social Media to promote well-being.



Julie Brayford
U101

Gender Identify Clinic - Board game

The game design aims to help players learn about their choices of NHS services in gender transformation. The game is based on deep experiential research. The game is proposed to be played in transgender workshop contexts.

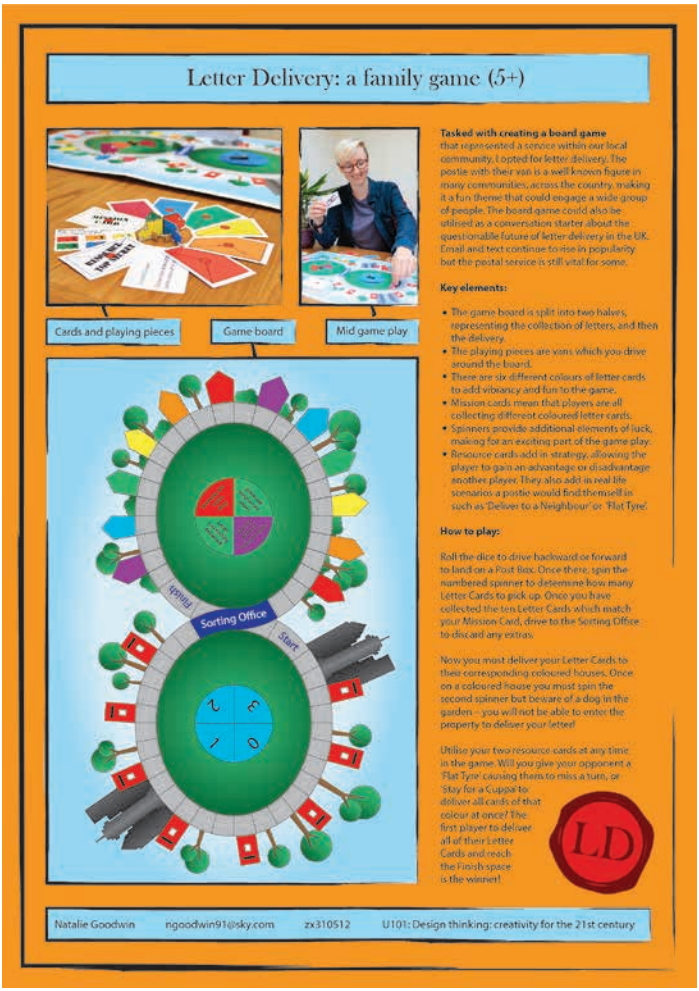


Natalie Goodwin

U101

Letter delivery: a family game

This game engages a wide range of players in experiencing the postal delivery service for themselves and potentially stimulate discussion about the future of this service.

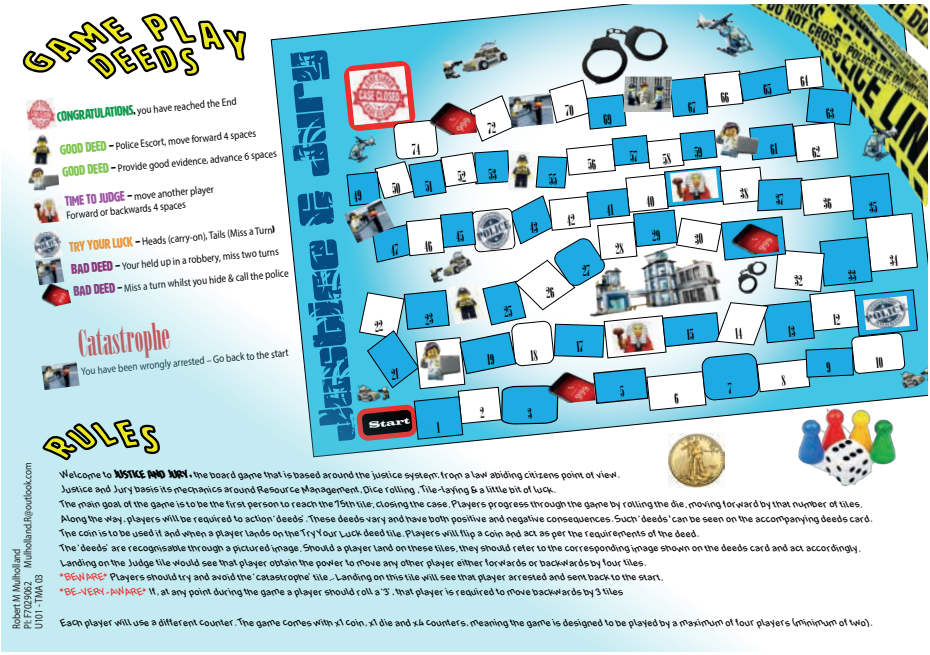


Robert Mulholland

U101

Justice and Jury - Board game

This design is a fun and simple board game using ideas of crime and policing to move around the track.

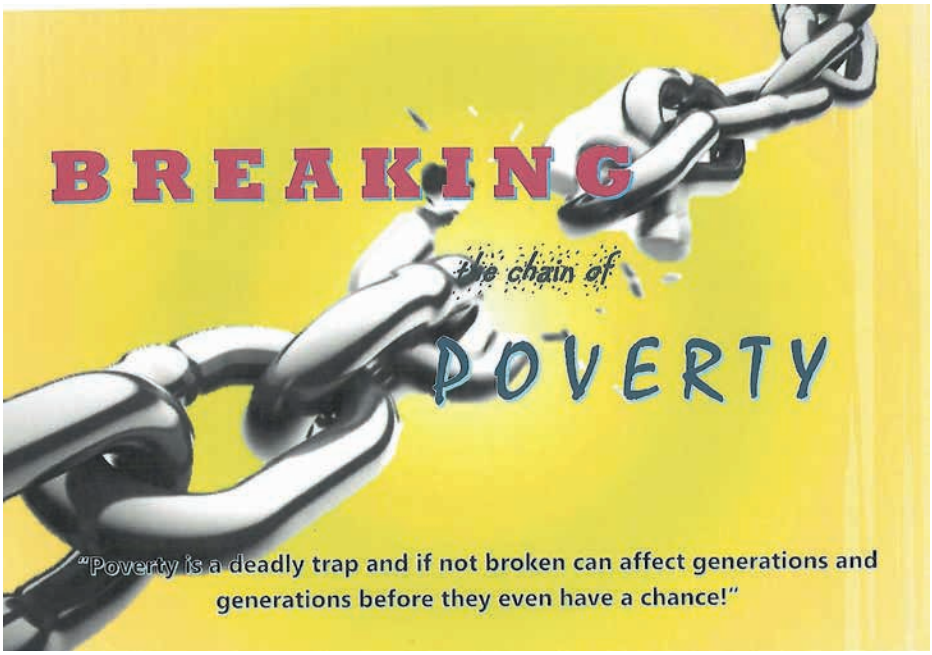


Rowena Dalziel

U101

Breaking Poverty - Campaign

This campaign poster calls for addressing 'poverty' as a priority area under the UN's sustainable development gaols.



Rukhsana Ali

U101

Delay! The transport game for risk takers

This game exposes players to the often stressful experiences associated with traveling on the London Transport network. It aims to allow players to laugh about the shared experiences and maybe in conversation, learn from others' how to deal with unfortunate events when journeying.

Thelma Babbs

U101

Allotment antics - Board game

This appealing and educational game challenges the players to successfully maintain an allotment from sowing to harvesting crops for one year. Testing the game showed lots of excitement around determining the winning gardener.

T217 - Design Essentials
T218 - Design for Engineers

Design Essentials takes a broad look at the designs which are all around us, considering how designers have used their skills to translate ideas and needs to create such designs as potato peelers, chairs, bicycles and buildings. In this second level module students learn about the essential skills and practices that designers use to create detailed design solutions. The module develops students' ability to identify opportunities for design, meet the needs of potential users and create and communicate new design solutions. The work shown here demonstrates students' skills in the research, planning and development of design projects as well as the ability to translate design ideas into well-specified products.

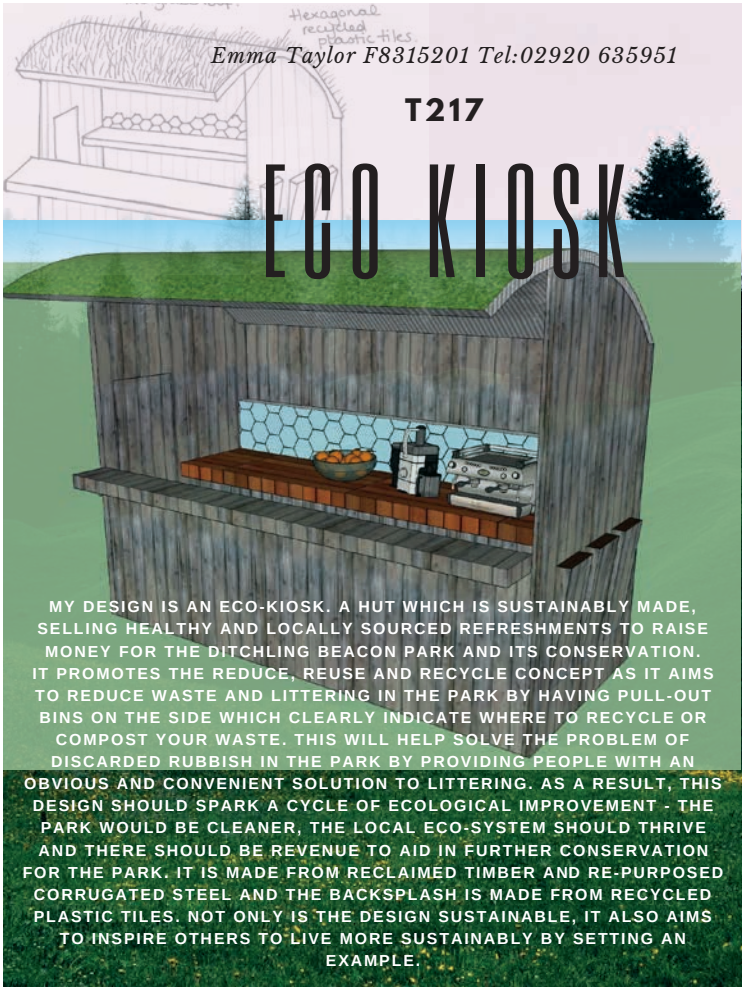
Based on selected teaching materials from T217 Design Essentials, this module is presented for students on the Engineering Design pathway of the BEng.

Emma Taylor

T217

Eco-Kiosk - Site specific design

This design responds to a brief around litter and refreshments in the Ditchling Beacon National Park. It offers a solution in a form of a multifunctional kiosk made out of natural and recycled materials sympathetic to the surrounding environment.



Iain Chantler

T217

Hidden storage for small kitchens

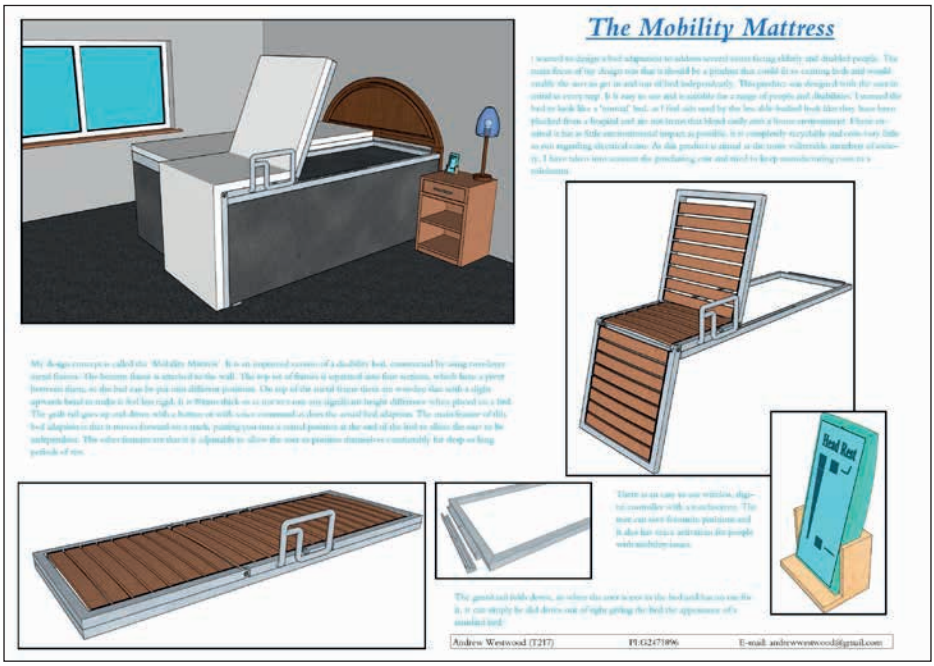
This concept design addresses user needs of maximising storage space in a small kitchen. It proposes to reduce kitchen clutter by equipping underutilised space with the innovative horizontal slot storage that fits under the kitchen units.

Andrew Westwood

T217

The Mobility Mattress

The following concept design is aimed at elderly and disabled people. It includes an electric mechanism and wireless control panel. This solution promotes independence of individuals with limited mobility while blending into a house interior unlike other existing solutions.

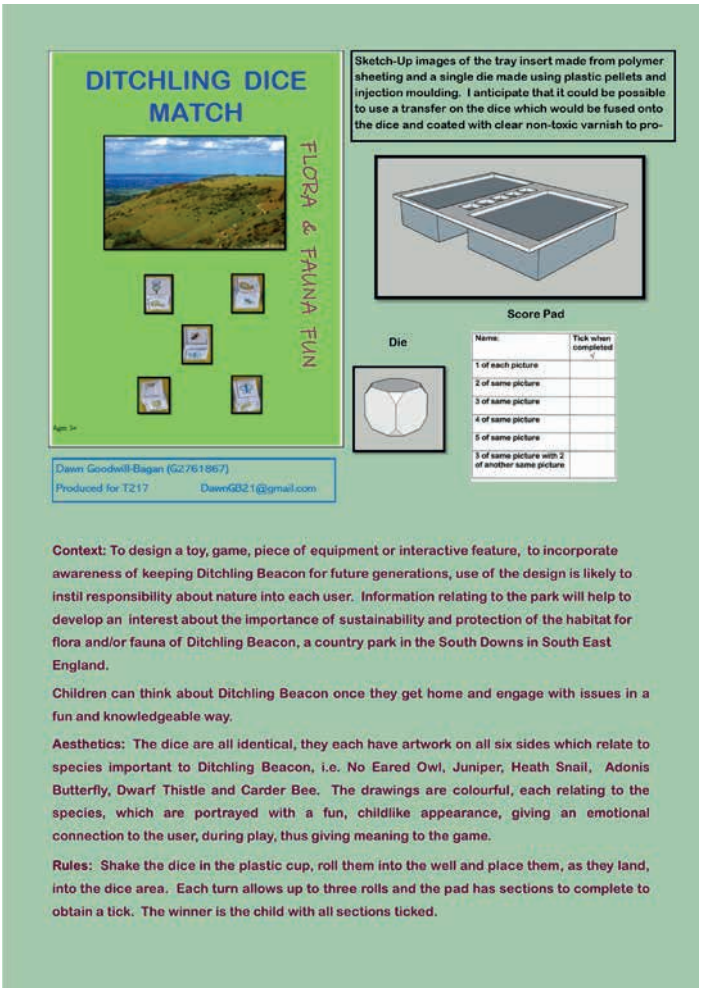


Dawn Goodwill-Bagan

T217

Ditchling Dice Match – Site specific design

This site-specific design is for a National Trust site in southeast England. The idea involves a dice game aimed at educating primary school children on the surrounding environment and the species important to Ditchling Beacon.

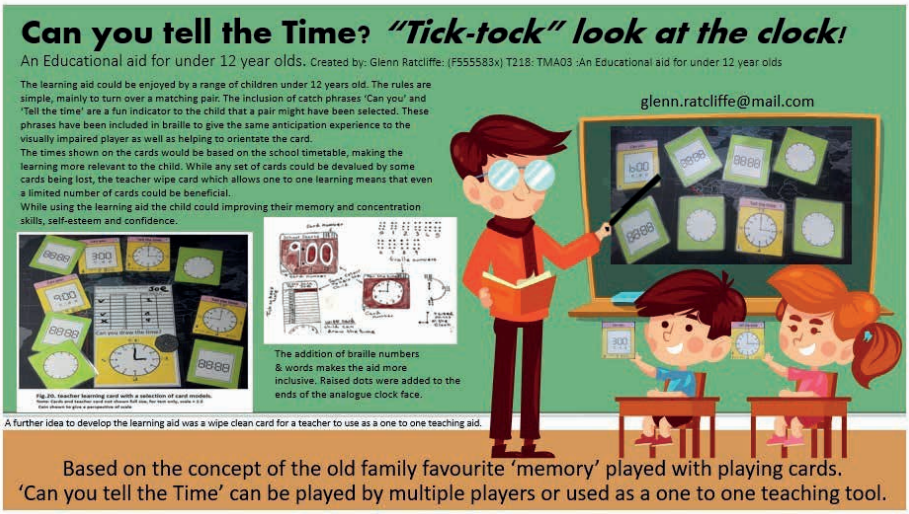


Glenn Ratcliffe

T218

Can you tell the Time? - Educational Game

The game is aimed at under 12 year olds as an educational aid for learning to tell the time. It features Braille numbers on the cards to address inclusivity and can be played by multiple players as well as used as one to one teaching tool.

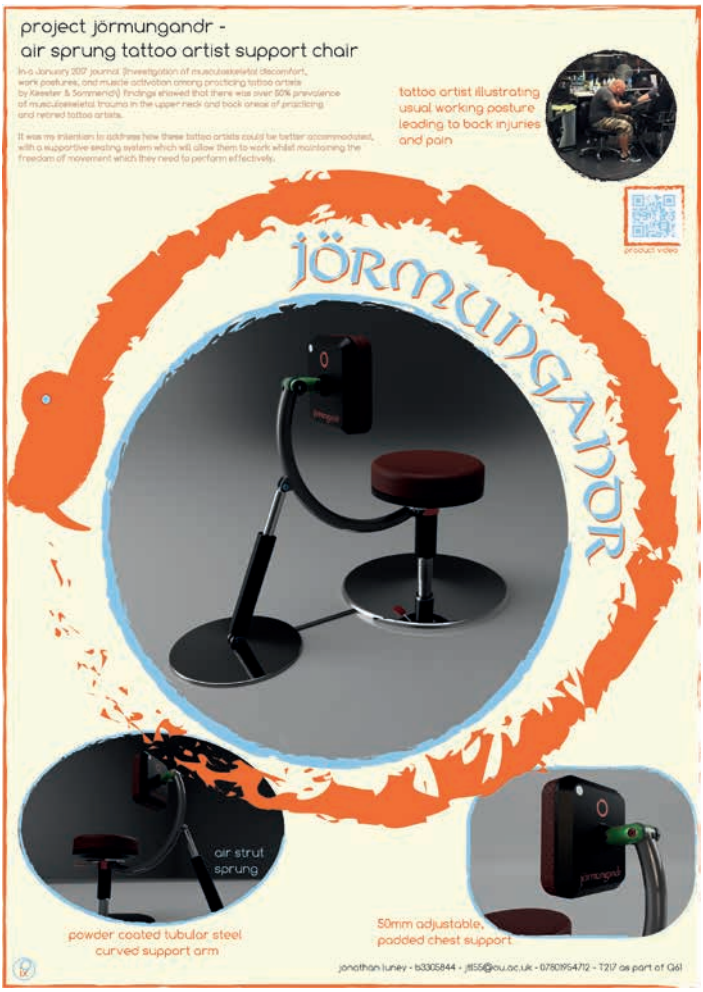


Jonathan Luney

T217

Project Jörmungandr – Tattoo artist support chair

This design focuses on user needs and addresses the issue of musculoskeletal trauma in the back and neck in practicing tattoo artists. The proposed solution is a seating system with an air sprung support that reduces muscle strain while maintaining the freedom of movement.



Karen Kilborn

T217

The Recycle Hub - Site specific design

An interactive design idea to promote sustainability and preservation, and deal with litter at the Ditchling Beacon National Park. It aims to encourage children and/or families to learn about the local wildlife and how they could recycle discarded plastic bottles into functional DIY bird feeders.

Nylia Ashrif

T217

Get Hooked - Planting system

A smart, self-watering, planting system which aims to combat the time and space constraints of modern living through the 'grow-your-own' initiative. It re-purposes condensation/wastewater from tumble dryers, into a nutritious source for the compact (indoor/windowsill) hydroponic vegetable garden, tailoring growing needs to the gardener.

T317 - Innovation: designing for change

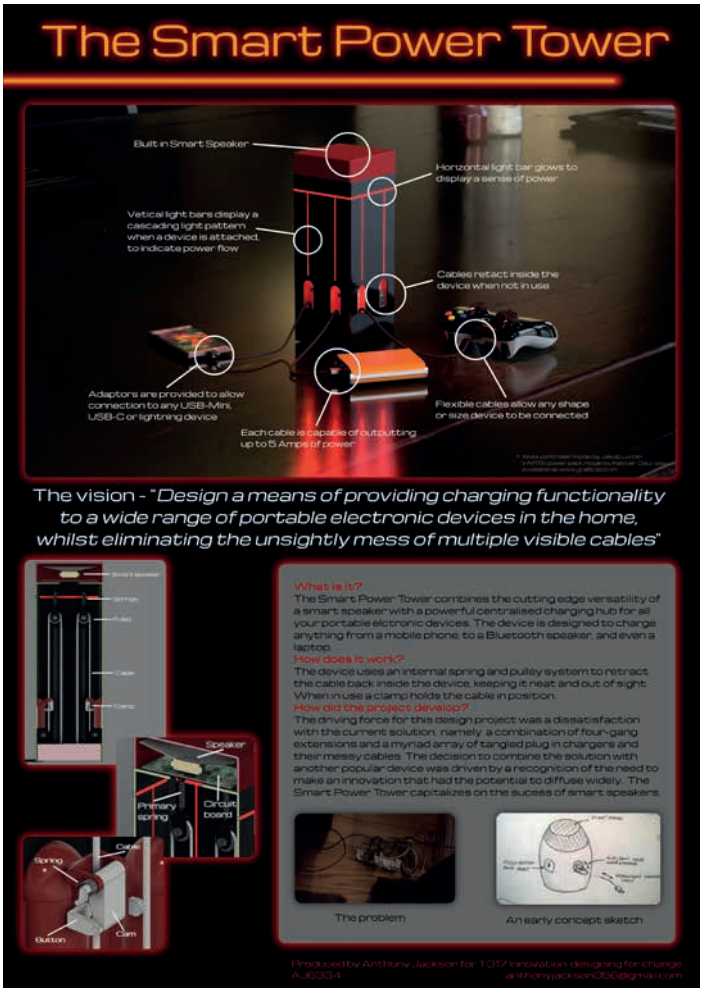
Innovations emerge from complex, dynamic, iterative processes. This module looks at how opportunities are created and ideas generated for innovation and developed into successful products, services and systems. The module looks not just at innovation for commercial advantage but also considers how, through responsible design, innovation can contribute to the development of a more sustainable future and reduce the negative impacts of innovation. The work shown here presents the outcomes of some of the open-ended projects which completes students' design studies. Students identify a problem and develop their own innovative solution.

Anthony Jackson

T317

The Smart Power Tower

An integrative smart power-hub which combines; audio, centralised device charging, USB connectivity, Blue-tooth, visual-feedback and aesthetics into a sleek design proposal, in efforts to save space, reduce mess and increase functionality, for portable devices around the home.

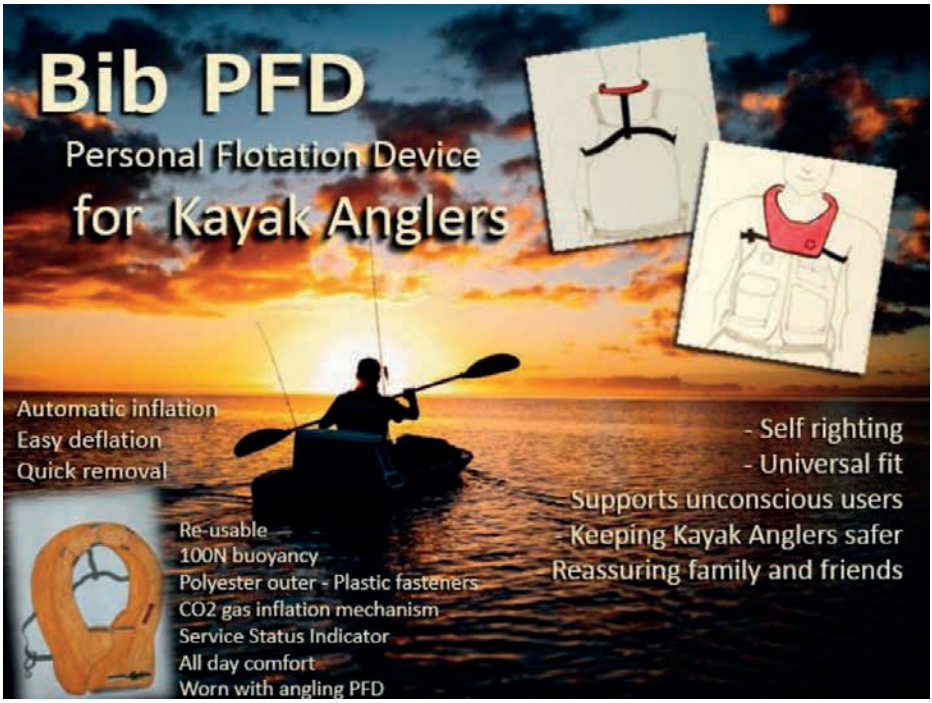


Brian Moran

T317

Bib PFD (Personal Flotation Device) for Kayak Anglers

This device is an automatic inflation and lifesaving aid, to support both conscious and unconscious water rescues of Kayak Anglers, in times of emergency (e.g. falling overboard).

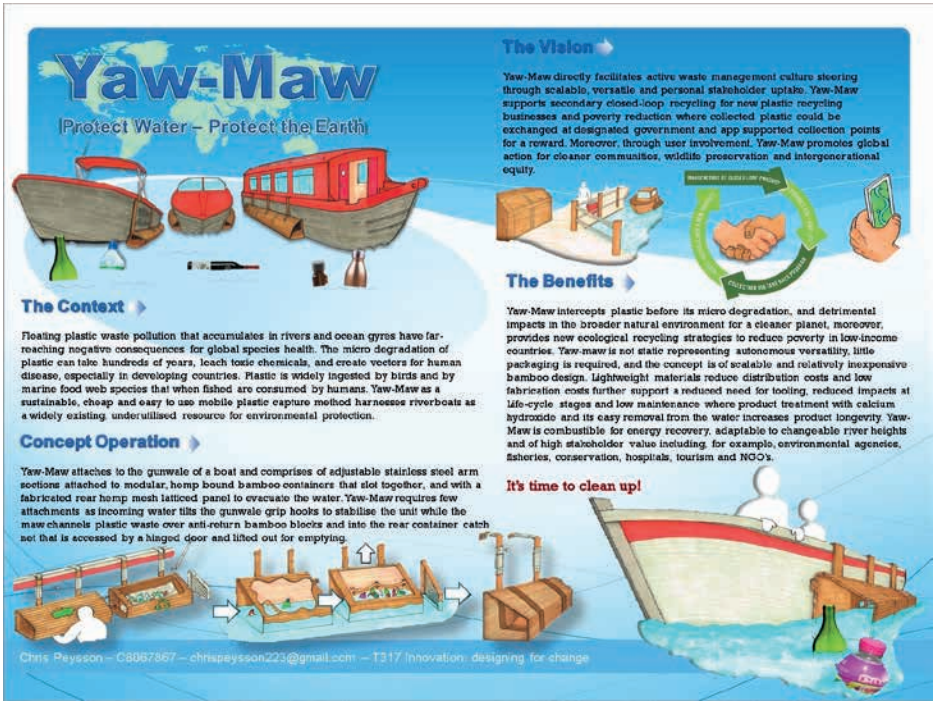


Chris Peysson

T317

Yaw-Maw

This concept was designed in response to the urgent need to deal with the impact of plastic waste in oceans and waterways. The design proposal is for retro-fitted system that can be added to boats to capture and sieve plastic waste as they sail which would be used alongside an incentive system to encourage its use.

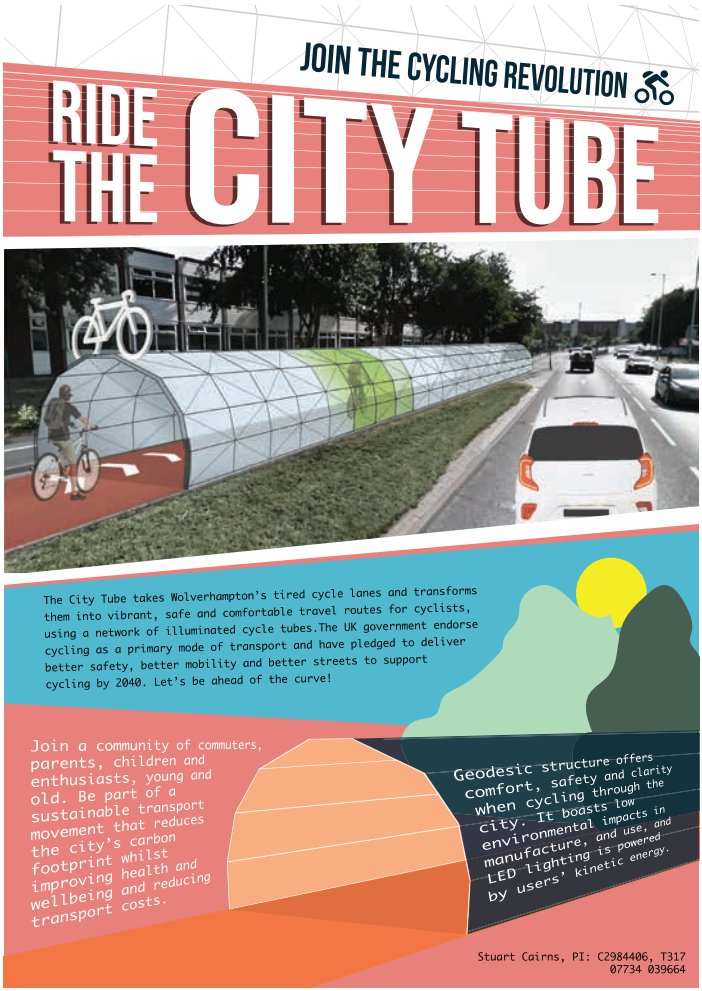


Stuart Cairns

T317

The City Tube

A reconfigured design idea aimed at city traveling, cycling and reducing carbon footprints. It harnesses kinaesthetic energy to illuminate sheltered cycle routes, thus creating a safer, interactive, cost effective and environmentally friendly mode of transportation.



The exhibition was kindly supported by the Open University's 'More Students Qualifying' (MSQ) project and the School of Engineering and Innovation.

For more information on the Design and Innovation course visit:
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