DATTA Vic Teachers' Toolkit

Teaching Wood, Metal and Plastics

Technologies & Society

- The United Nations have set 17 sustainable development goals to transform our world by 2030. **The World's Largest Lesson** website introduces these goals to children and young people, and includes a wealth of lesson plans, project ideas and printable posters for the classroom - many of them suitable for Design & Technologies.

- The Nail-It is an award-winning 3D-printed tool from QLD students Aidan and Nima, designed to help people with arthritis or Parkinsons Disease. This link includes the source files for free.

- e-NABLE is an online community of 3D designers developing prosthetics and other products to help people. Their website has a range of 3D printing resources

- The Plastics Challenge is a unit of work from Practical Action which explores the global issue of plastic waste. It includes teacher notes, student worksheets and posters

- The James Dyson Foundation has created a wide range of Design & Technologies projects for the secondary classroom, including designing for a disaster and helping people living with a disability

Technologies Contexts

- Forest Learning has a searchable bank of resources, all aligned to the Australian curriculum. They have some really interesting VR films your students can watch.

- Justin Elliot shared this Wild Forest Adventure for Year 7 D&T (Wood)

- Wikipedia has a fascinating Timeline of Materials Technology!

- Visy have partnered with Cool Australia to produce education resources about paper and cardboard recycling. Click HERE to explore.

- NASA has an amazing range of 3D printable models on their website

Creating Designed Solutions

- TOP DESIGNS is a fantastic source of inspiration for your students, especially as they now have more digitised content, including virtual tours and folio pages. Congratulations to all the amazing students (and their amazing teachers!) whose work is shown here.

    - [Top Designs 2021](#)

    - [Top Designs 2020](#)

- Peter Murphy from Northcote High School created these great resources which can be used in the classroom over one or two periods, or as extension activities. Click [HERE](#) to download all eight worksheets.

- Here's a great Unit of Work from Jill Livett on [Making Cardboard Furniture](#)

- Mark Grech has also shared a [Cardboard Furniture](#) design project

- Click [HERE](#) for a design brief and [HERE](#) for a project template for a Chair Design unit of work, also from Mark Grech

- Steph Porinno also shared this great set of activities for students to develop their [drawing and sketching techniques](#)

- The UK's Design & Technology Association had produced a [Design Thinking Random Scenario Generator](#) - great for setting up some short design talks for students

- Why not build a street library for your local community? [This site](#) features free plans and lots of tips for builders

- [The Junior Landcare Trust website](#) has plans and instructions to build your own wildlife nesting boxes

- Stanford's [Five Chair Challenge](#) is a fun and simple activity

- Ben McKenzie, Dan Weymouth, Trevor Ellington and John Mulvey have shared their Year 9 Wood program that they developed jointly. Included is a [Sample Production Plan and Journal](#) that you could adapt for your own classes, and their [Technology@Home Planning document](#) - which is useful both because it sets out a clear program to follow but it also demonstrates how teachers can collaborate on projects online.

- [Craftsmanspace](#) have a range of projects that can be made using scrap metal, including a chess set made with scrap fasteners

- Michael O'Brien shared this great set of resources on design **elements & principles**

- Mark Evans from Lyndale Secondary College created this comon assessment task on designing and making an LED Pricture frame. It includes:

- [Student Worksheet](#)

- [Rubric](#)

- Damien Ridley from Edinburgh College shared these Years 7-10 classroom projects.

    - [Spatula Design Brief - Year 7](#)

    - [Desk lamp Design Brief - Year 8](#)

    - [Small Engines Design Brief - Year 10](#)

Designers and Design History

- The Design Museum has a great range of resources on design:
    - [What is Good Design?](#) - a great resource on Dieter Rams Ten Principles

    - [Memphis Group - Awful or Awesome?](#)

    - [Angelpoise Under the Spotlight](#)

    - [Post-in Notes](#) - why has this iconic design stuck around for 40 years?

    - [Thonet Chair No. 14](#) - the world's most popular chair

- Search [Furniture](#) on the National Gallery of Victoria's website for great sources of inspiration from their collections, including education resources on Memphis Design and Frank Ghery

- Explore the world of [Joris Laarman](#), whose work explores how technology can transform design, and uses emerging digital tools and machinery to develop futuristic furniture and design processes

- Be inspired by the work of [Marc Newson](#), Australia's most famous industrial designer

- Challenge your students design and technologies knowledge with these [five quick quizzes](#) from Jill Livett (and don't worry, the answers are there for you too!)

Teachers Sharing

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