

Project 2.

>> Breaking the Catch22 of Experience / My First Client / Einstein "Demo Rigs".

Hello again, my name's Jude Pullen, and I'm a creative technologist, working with The Design and Technology Association to explore new learning contexts for D&T in Schools.

Having been an **undergraduate**, there is often a Catch22 in getting experience - **you'll struggle to get internships unless you already have experience**, but how do you get experience in the first place?

Granted, at the younger ages of KS3 through to GCSE, you are never expected to get a **'real life' client...but what if this was disrupted...**

The Irony is - their **First Client** is **right in front of them**
- **Teachers** - can be their First Design Client!

The task is for D&T students to **seek out a school lesson** that needs a **'Demo Rig'**. Schools are often short of **budget for resources**, and this is also an interesting way for D&T to **'be of service'** to other lessons **and make the point** that most school Demo's were indeed **'Designed'** by a **Designer - working with educators - to inspire kids**.

This project turns the tables and entrusts the D&T kids with the **responsibility** of educating **others**.

To give an **example**, I built a Wind Tunnel for only **£20-£30**, which can be used either by **Physics Tutors** - to teach Aerodynamics of Aerofoils, or perhaps **History Tutors** to teach the history of Aviation... and why we stopped at Tri Planes, and didn't just keep adding wings!
Even **Sport Science** might want to test Aerodrome Cycling Helmets in it?

To **drive home** the point about **'active learning' vs 'rote learning'**, is that by making the students have to really learn the **subject matter**, they are really compounding their learning.

It is not enough to just know the facts; they have to master and **embody them** in the Demo Rig.

"If you can't explain it simply, you don't understand it well enough" is a quote I love from Einstein. I try to apply it to check myself, as much as I do to others when in a jargon-heavy or 'elite' group of experts.

Indeed, like teachers, the **best are able to take an idea and make it accessible to all** - but of course, students will find out that it's harder than you think!

The **point is that D&T students have to understand a subject more deeply** than the level they build the Demo Rig for. In Industry, the designer will have to not only know the **particulars** of a given device, but the **holistic space around it**.

Building on the lessons from the **previous learning unit** of seeing a squirrel's wanton destruction of your Bird Feeder, the likely irony is **that fellow students may abuse and misuse** these Demo Rigs, and this will naturally prompt a design discussion on if to **vandal/idiot-proof a design**, or explore more **psychological prompts to nudge behaviour** away from such destruction.

These are hard knocks, **but vital** for any budding Designer.

Lastly, Industry feedback also liked the notion of '**finding opportunities within the organisation**', as this is a key trait in many **innovators** from Design through to **Entrepreneurs**.

Secondly, the practice of '**turning tables**' raised many a knowing smile - as this is a great practice to start young. The very act of '**seeing things from the other perspective**' will be cohesive to the school, but also a life skill that can be applied in studies, work and of course **life in general - and indeed, in the next project on Inclusive Design**

This again, reasserts the **uniqueness of Design's value in Education** - how many other subjects would encourage the students to be the Teacher, and to see their **peers in a different light also?**

Thanks for watching, and please take a look at the guide below - and do leave comments and questions, we're excited to hear back from you.

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