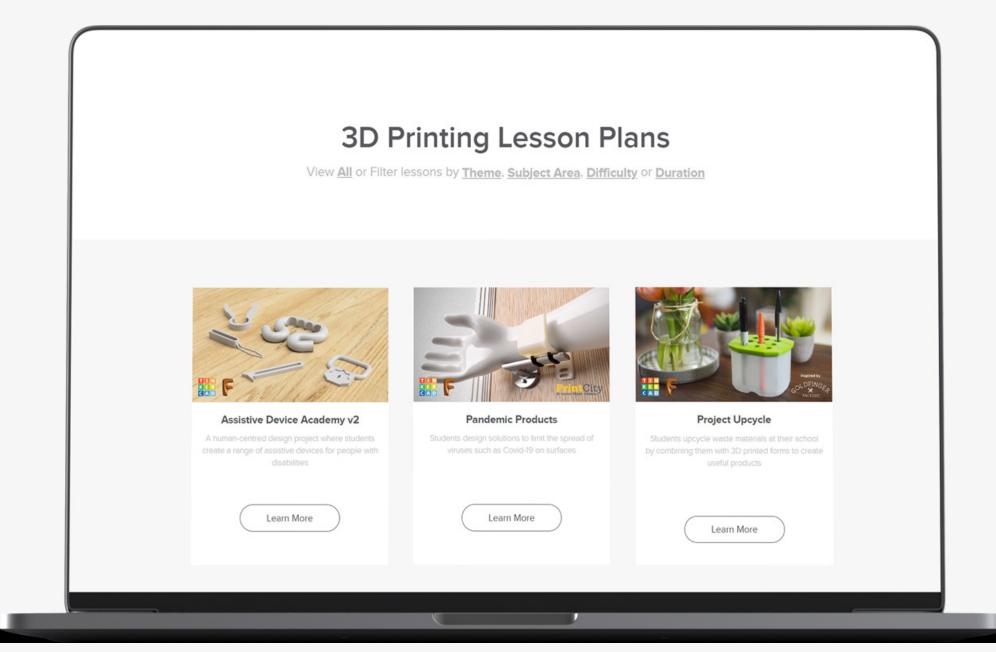
## PrintLab. classroom

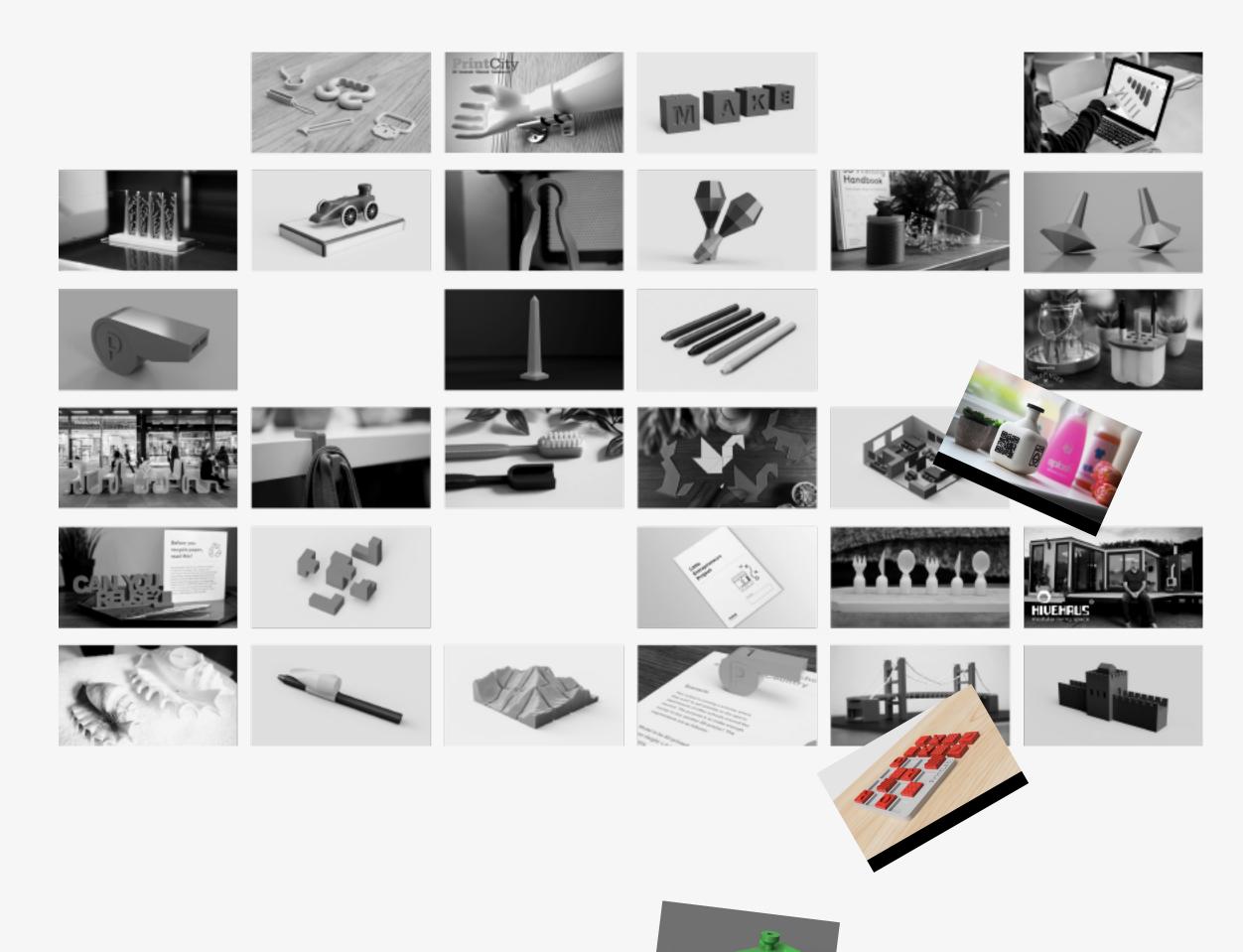
for schools

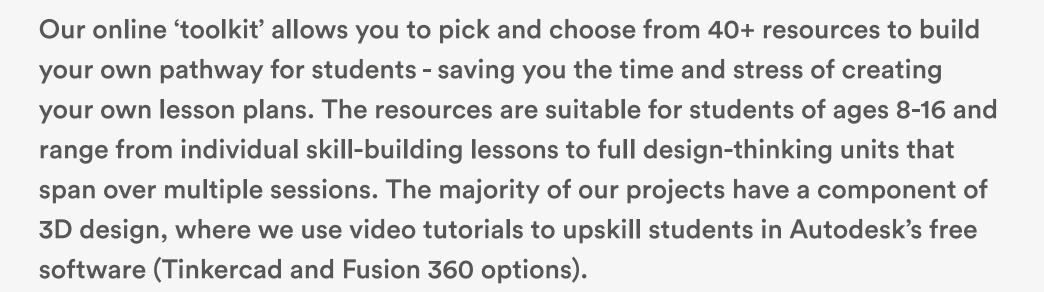


## we make 3D printing curriculum.

PrintLab Classroom is an online platform of 3D printing lesson plans. Our approach is to take inspiration from the innovative uses of 3D printing in industry and bring these through to education. The curriculum is aligned to a range of standards across different subject areas and challenges students to design assistive technology, reusable packaging prototypes, hands-free virus solutions and more.







## Our platform is a toolkit for educators.

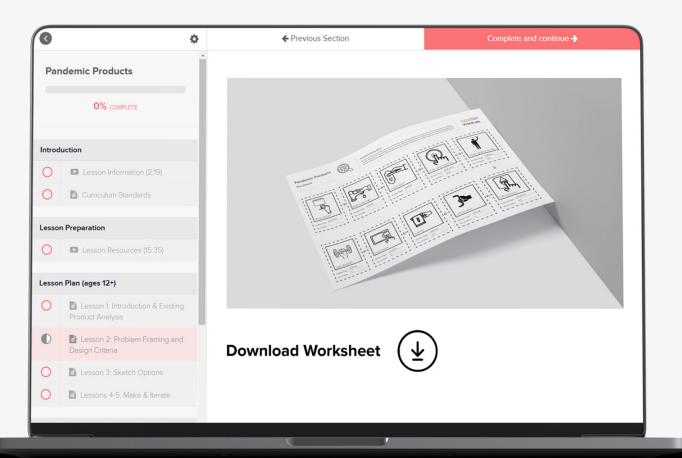








## we blend learning.

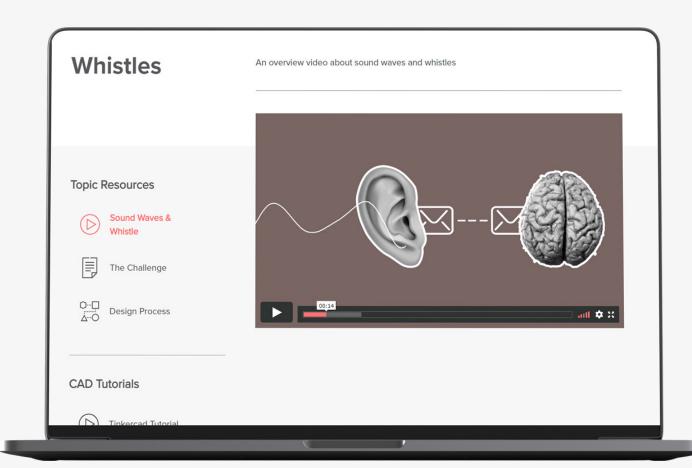


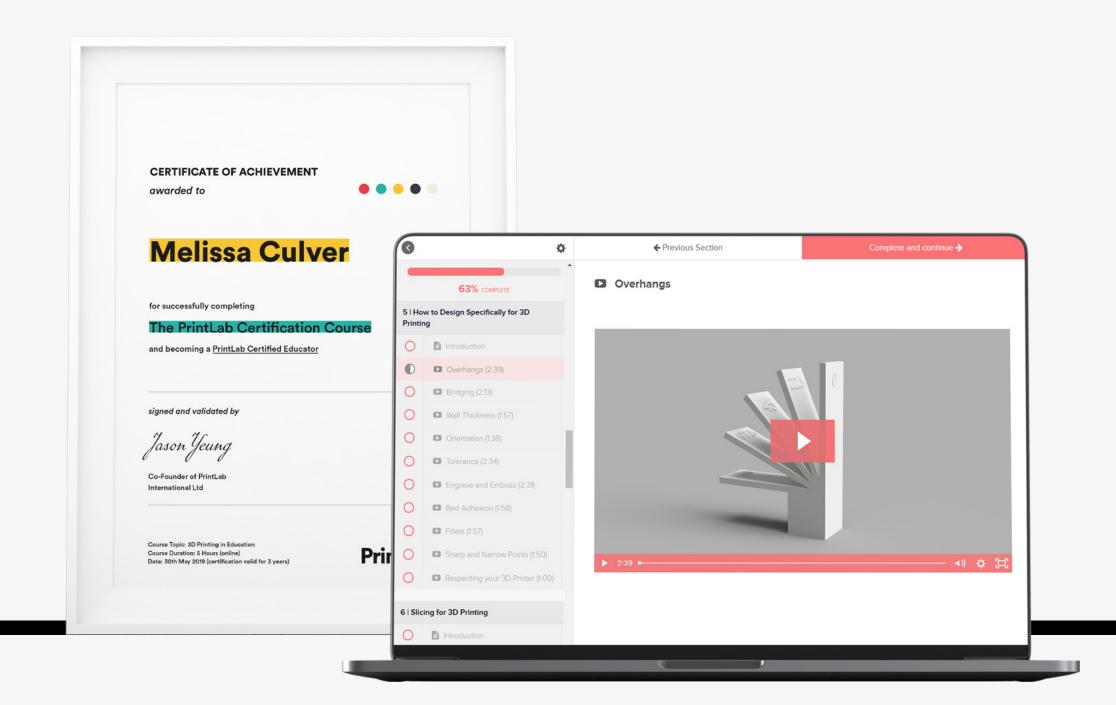
### **The Teacher Portal**

The teacher portal is home to PrintLab's growing library of lesson plans. Each lesson consists of step-by-step instructions, together with a range of downloadable and editable teaching resources such as presentations, worksheets and assessment rubrics.

### **The Student Portal**

The student portal is home to the online learning resources required for each of PrintLab's lesson plans (CAD tutorial videos, explainer videos etc). For each lesson on the teacher portal, there's a matching resource on the student portal. The lesson plans will instruct you on how and when to direct students to these resources during a project. The student portal is accessed via a code and allows resources to be viewed on devices anywhere and anytime - making it the perfect solution for blended, flipped and distance learning.

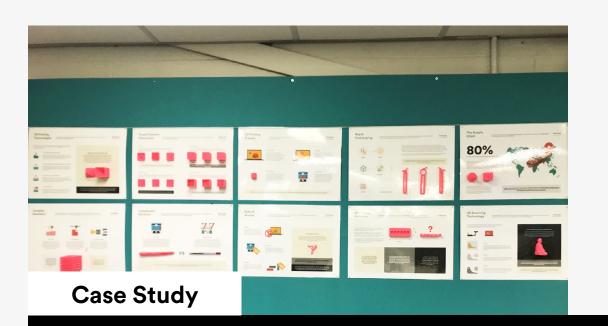




The PrintLab Certification Course is the starting point for teachers who require professional development training. The aim is to empower teachers in becoming proficient and confident in teaching 3D printing curriculum, whilst ensuring they have the necessary 3D design and 3D printing skills. The 5 hour self-paced online course covers everything from the 3D printing industry and process through to CAD techniques and design thinking. At the end of the course are 3 assessments and once passed, teachers will become PrintLab Certified Educators.

## the journey begins with teacher training and certification.

## students will learn technical skills.



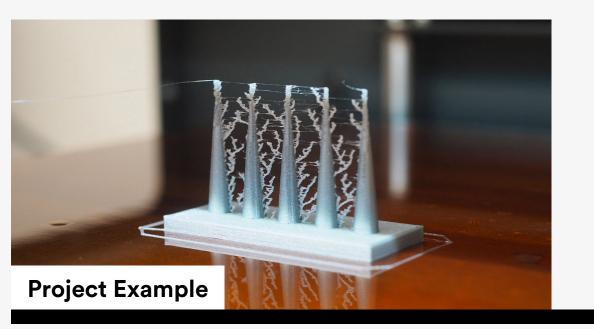
## **3D Printing Basics**

Latymer Upper School (UK) used PrintLab's 3D Printing Basics project to create a wall display explaining all the fundamentals of the 3D printing industry.

## **3D Modelling Basics**

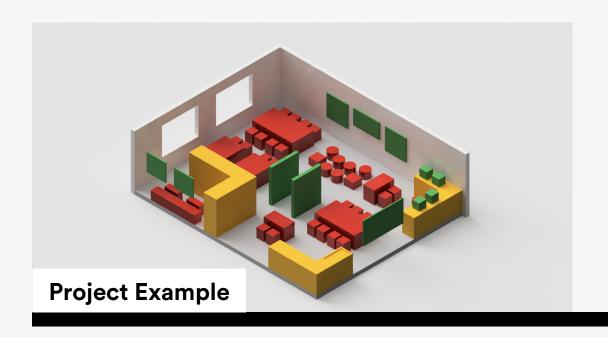
A self-paced mini-course that introduces students to 3D modelling in Tinkercad software.





## Slicing for 3D Printing

A video series that shows the effects of changing slicer parameters such as print speed, print temperature and retraction.



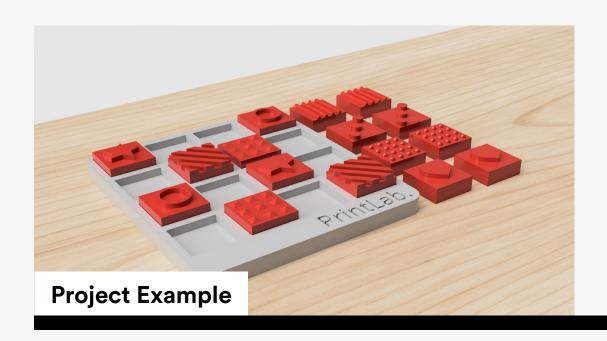
## Redesign your Classroom

Students listen to the thoughts and opinions of their peers, before collaborating to redesign their classroom in view of enhancing their learning experience.

## **Assistive Device Academy**

Students at LJ Hauser Junior High School (USA) used PrintLab's Assistive Device Academy to design products such as assistive bottle openers in an iterative process.



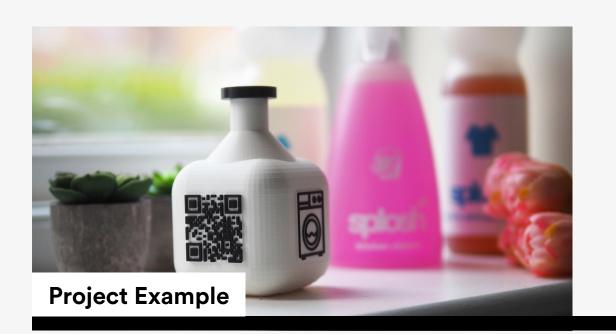


## **Tactile Games**

A human-centred design project where students create tactile games for people with visual impairments.

# students will learn human centred design.

# students will learn how to solve global problems.



## Packaging Redesign

A project where students learn about the circular economy before rethinking and redesigning the way we create and use packaging.

## **Pandemic Products**

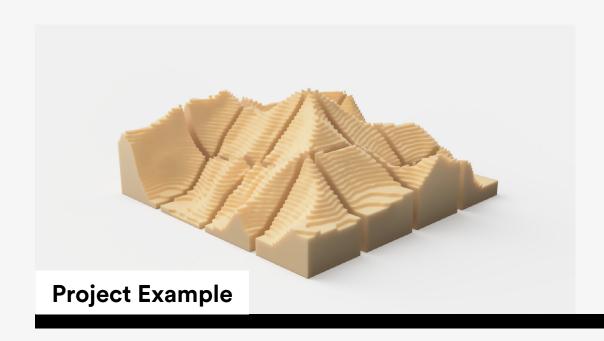
Students learn about the transmission of viruses such as Covid-19, before designing 'hands-free' solutions to limit their spread on surfaces.



## Case Study

## **Project Upcycle**

An example student design from Maryville Middle School, who upcycled plastic bags into a woven 'bag-for-life' with 3D printed handles.



### **3D Contour Models**

Students collaboratively design and 3D print a 3D contour model, whilst learning about scale and land forms.

## **Balloon Powered Dragsters**

Students at Re:Coded (Iraq) learnt about forces and motion to help them design balloon powered dragsters, which were raced in a class competition.





## **Self-Watering Planters**

A project that teaches about photosynthesis, before self-watering planters are designed to grow plants in the classroom.

# students will engage with STEM subjects.

## we support individual teachers.

## PrintLab Classroom Teacher License (1 Year) \$299

- 1x teacher portal account (40+ fully-resourced lesson plans with new content each month).
- 1x seat to The PrintLab Certification Course for teachers (5-hour online course).
- o 30 x student portal users (access code is provided that allows 30 users to use PrintLab's student portal at the same time. The student portal hosts explainer videos, CAD tutorials etc required for the lesson plans).

## PrintLab Classroom Site License (1 Year) \$999

- o 10 x teacher portal account (40+ fully-resourced lesson plans with new content each month).
- o 10 x seats to The PrintLab Certification Course for teachers (5-hour online course).
- o 200 x student portal users (access code is provided that allows 200 users to use PrintLab's student portal at the same time. The student portal hosts explainer videos, CAD tutorials etc required for the lesson plans).

## we support entire schools.



## Mona Luth Edmonton Area RCSD (Canada)

"The certification course was totally worth the time spent.

I kind of knew what I was doing but the course made me understand the reason why things would work or not work.

Because it was online, I was able to work on it when I had the time and I could review and repeat until I got it"



## Becky Wynne Maryville Middle School (USA)

"I was just selected as District Teacher of the Year and will be competing at the regional level in the coming months. Your curriculum has played a big role in my success, so I appreciate you so much. The assistive device lesson has led me to a partnership with the high school nursing program and their connection to local nursing homes. I'm so excited to see where that relationship leads. So many career connections!"





### Stuart Lawn FabLab Manorhamilton (Ireland)

"The kids loved it and we actually managed to get a working whistle at the end! One of the kids has been so keen on it he convinced his Dad to buy a 3D Printer kit and they spent the weekend building it together!"



## Ed Charlwood Latymer Upper School (UK)

"Imagine how powerful it would be if every GCSE and A-Level D&T student had access to the Pandemic Products lesson, and a 3D printer at home!"



### Michele Brezovec South Meadow School (USA)

"I have four classes of 3D design, all using PrintLab Classroom. The ability to design and create in 3D will be a part of their future, as will be learning from their mistakes!"

## say hello. or start a free trial.

