



The charity designing
new opportunities

Registered Charity No. 1008128



Harnessing the power of great design

“Orla has so far spent all her leisure time in the chair – now called ‘chill chair’ and it really makes her smile!”

Orla’s mum Nyree

“George loves the Freasel and has been enjoying working on a larger scale. We’ve found it easy to set it up for him to use in any of his chairs. It’s helping George enormously” George’s mum Jane

Every day we use tools that help us open the doors to life’s opportunities. A pair of glasses help you see clearly so you can read, learn, and connect with your community. A bike helps you travel further and faster, keeps you fit, and might even help land you a job.

Each of these tools is designed; conceived in a person’s head and made reality through a process of manufacturing. For many of us, all the tools we need already exist, and can be used to open doors to new opportunities as we wish. This isn’t true for everyone.

That’s why we’re here; working with disabled people whose needs aren’t yet met, to design and make tools that help everyone overcome life’s barriers, and we’ll be here until the doors of opportunity are open for all of us.

Finding solutions

Sometimes, the issue is not whether something exists but whether it can be found. Our team are expert finders of all kinds of useful enabling tools. We're not here to reinvent the wheel, and we don't have time to! Making use of products that have already been made, either as they come or with an adaptation, is the fastest route to a great solution. Reach us by email at info@DEMAND.org.uk or call **01923 681800** and start your enquiry today.



Designing for one

So what if the thing you need just doesn't exist? This is where the fun starts! We'll listen carefully to your needs and we'll work together to find the right solution for you. Design at DEMAND is neither an imaginary nor a speculative exercise. We'll sketch, model, prototype, test, rinse and repeat in order to find the right solution. This is expert problem solving at work, on an individual scale that means we can make sure every detail is right. It's here where we see the awesome power of working one on one.

Designing for many

Design, done right, often outlasts us. While each design starts with a single person's need, we rarely find the impact stops there. Many people often have similar needs and by considering the varied needs of different people with different disabilities we can maximise the impact of the work we've done. Modular design means parts can be mixed and matched to suit each user, and carefully considered in-built adjustments mean one product will suit lots of people.



Making available to all

Design is intrinsically costly, with as many failures and dead ends as there are breakthroughs on the journey to finding the perfect solution. It's therefore important that we make sure we squeeze all the positive benefits possible out of the designs we create. Using our manufacturing knowledge to design products that can be made efficiently in the tens, hundreds or even thousands means the positive benefits of just one design project are replicated for every person who could use one of the products that starts its life at DEMAND.





Celebrating 40 years of game-changing designs

This year we marked 40 years since DEMAND's founding. Sadly 2020 was certainly not the year to celebrate. The pandemic and the constraints it has placed on working closely with vulnerable people and our team mates in the workshops has severely restricted our activities. Nonetheless the 'project board' never seems to get any shorter nor the requests any simpler! Despite all the lockdowns we still received almost 75% of our usual volume of enquiries which leaves us with a huge unmet need which we must address.

On average it costs around £14,000 to complete a custom design project. Considering the cost to develop a new product in a commercial design studio is anything from tens to hundreds of thousands of pounds, we are proud to be able to generate such great benefits from the

design projects we take on. We constantly strive to be self-sufficient but our current reality is that the cost of user-centred innovation, unviable in the commercial world, is only possible with the support of Trusts and Foundations, many of whom have been with us for much of our 40 years, and the many faith and community groups, and individuals who have been inspired to do what they can for us.

Over the past 40 years hundreds of design projects have culminated in game-changing benefits for disabled people all over the UK and beyond. These products are used day in and day out to keep people comfortable, independent and able to access as many of life's opportunities as possible. These benefits would cease to exist without your commitment to investing in people's futures and creating a more equal world for all.

We need your support to ensure we can keep on making great things happen in DEMAND's 41st year. [Read on to see what we've been working on and how you can get involved.](#)



One to Many – Bringing the benefits of our Shell Chair to more people with autism

In 2012 the first sensory rocking chair was brought to life together with students and therapists at The Collett School. It was a resounding success and the students found that they finally had the resource they needed to help regulate their sensory inputs. The chair was made with a fabric hood and rocked to give the students a safe outlet for stimming (the repetition of movements or sounds).

People with autism and other sensory processing disorders experience the world very differently to neurotypical people. Noise can be painful, the smell of a perfume can be nauseating, the bright lights of a classroom can cause real distress. The chair's hood attenuates the hubbub of the school environment. It's a bubble of comfort in a busy classroom that allows a child's batteries to

recharge. They can rest and get ready to engage with learning again.

The first chair was a handmade masterpiece; carefully drawn onto the wood with pencil and ruler and shaped with hand tools. Hundreds of hours of skilled time were spent designing, making and testing. But how many people can use one chair? The school soon needed more and parents began to tell us their children needed sensory chairs at home too.

This year we saw the culmination of 6 years of learning, experimenting and testing result in a new chair which fulfils all the important needs of the first (and more!) and crucially, is infinitely more scalable. Our goal of being able to meet the needs of many people has been achieved, all because of the benefits we were able to demonstrate with just one chair in one school.

Visit [DEMAND.org.uk](https://demand.org.uk) to find out more about the Sensory Shell Chair, and how your support will help bring even more designs from [One to Many](#).



“Never underestimate the effect you are having on so many people” Neil

A regular through our workshop doors, at least until the pandemic arrived, is Neil; who works with our designers to fine tune the features of the walking frame he uses every day.

Neil needs his walking frame to be sturdier than the standard models available off-the-shelf, so over time we have worked on the addition of strengthening braces to stiffen it up. Together we’ve experimented with a variety of materials, aluminium proving most promising because of it’s light weight that still allows Neil to lift his frame into his car. However with continued daily use, the repeated stress cycle the struts undergo eventually causes the aluminium to work harden and become liable to snap.

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In search of a better solution we began experimenting with carbon fibre struts which are almost half the weight of aluminium but around 3 times as strong. There’s a reason carbon fibre is the mainstay of today’s performance cars!

Neil’s carbon fibre reinforcements are proving more than strong enough. Work continues to find the perfect walking frame that will help Neil to navigate his home efficiently. Simple adaptations like these mean Neil is free to get around in exactly the way that suits him.

If you or someone you know is in need of a specialist design that will open the doors for you to do something you love, get in touch!



“What I really like is the suction pad attachment. That really does hold fast on the tiled wall I have it fixed onto.” Simone

Another success of 2020 is the portable dressing hook, a game changer for people who aren’t able to reach all parts of their body to dress and undress.

These hooks were tested in collaboration with The Thalidomide Trust and are helping people remain independent by taking a dressing hook with them when out of the house and when travelling (a luxury we are all missing at the moment!). A portable dressing hook means a public bathroom can be used without assistance, a holiday can be booked without

needing to check for adequate provision in the accommodation and changing at the gym is no longer a cause for concern.

These hooks make great use of 3D printing technology, featuring customisable caps that can be modified to suit each person’s individual dressing technique.

We’re using 3D printing and other digital manufacturing techniques to maximise scalability of our designs. If you’d like to be involved, find out more about volunteering with our team online at [DEMAND.org.uk](https://demand.org.uk).





On a roll - The lasting impact of One to Many

One to Many is not a new idea to DEMAND. Since 1980 our designers have been working with disabled people, their families, friends and caregivers to understand and overcome the unique barriers people can face simply living in the world. When we find a solution that helps an individual achieve something they want to, we rarely find that's the end of the story.

In the case of Boccia, a target sport enjoyed by people all over the world, equipment was often made as a one off, as was common with many of the assistive devices made in the years gone by. Boccia ramps were made for each player by crafty grandparents in garages, inventive sports teachers and of course, DEMAND's designers!

Each was different, partly due to each player's needs, the differing availability of materials and machinery and the wildly varying experience of the maker. It was time intensive and not everyone could get access to the kit they needed to play. The same engineering challenges were solved ad-infinitum by every person making a new ramp.

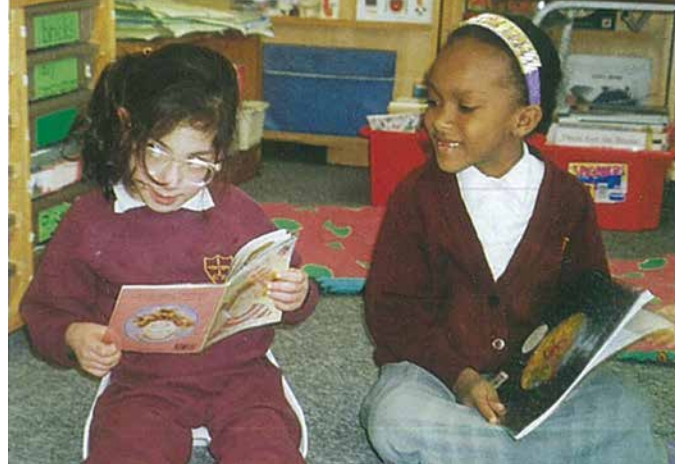
From the days of making one ramp for one individual back in 2004, our team has been standardising equipment and refining a range of ramps that can be manufactured in batches of any size. Anyone who wants to play Boccia can get the ramp they need and adjust it to suit their playing style without needing to wait for a bespoke design. The user can be enjoying playing within days, such is the availability of ramps now.

Since making our first Boccia ramp, nearly **1200 people** from Japan to Bermuda and many countries in between use ramps made by DEMAND in the UK to enjoy the game at every level. See the full range at [DEMAND.org.uk](https://demand.org.uk).



Four decades of game-changing designs – the 1980's

Founded by **Lady Clare Renton in 1980** after finding almost no suitable equipment for her daughter Davina who was born with Rett syndrome, DEMAND soon began finding new practical ways to help disabled people access life's opportunities. Esther Rantzen, an early and continued supporter of DEMAND, met the beneficiaries of early design projects like this overbed table.



1990's

Now based at Napsbury Hospital, DEMAND's team was able to work on more than double the amount of projects each year that helped people achieve their goals of education, comfort, increased independence, and access to work and leisure. The first scalable designs were created, including the Neurological Chair for people recovering from stroke, and the ever popular children's Floorsitter which is still available today.



2000's

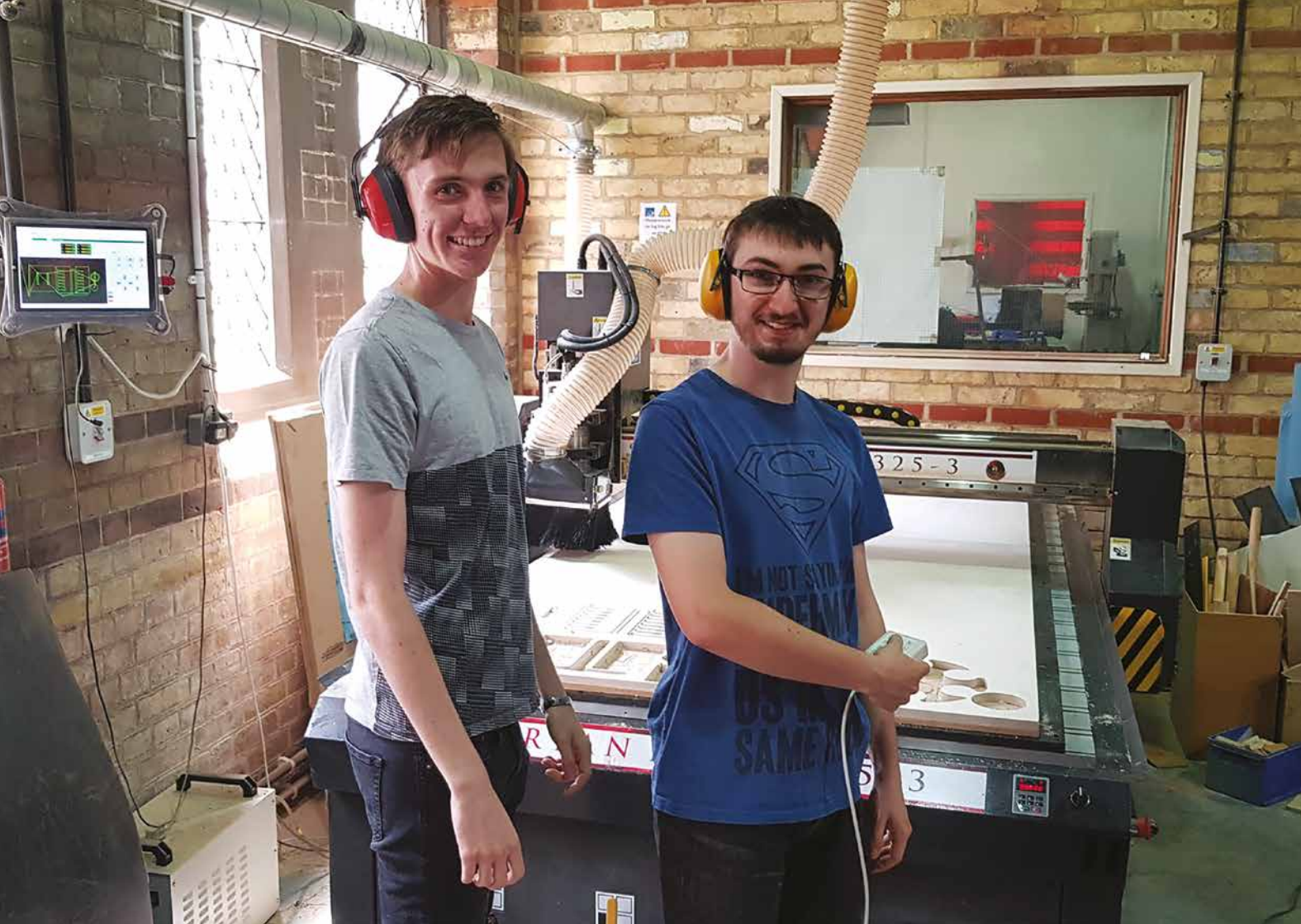
With a move to a larger workshop in Abbots Langley the team supercharged their output and increased the number of positive outcomes. In 2010, the team was able to generate positive outcomes for nearly 1400 people, **10 times as many as in 2000**. Highlights include the Greenpower electric car, made with hand controls instead of pedals and the introduction of DEMAND's Boccia ramps.



2010's

A decade of growth and change for the charity saw investment in new digital manufacturing technologies that have given us the potential to generate positive outcomes bigger than we've seen before. In this decade nearly **30,000 people's lives were positively impacted** as a direct result of our work. With your help, we'll take the next steps and help even more people break down barriers to opportunity and independence in the decade to come.





How we're supporting the designers and change makers of the future

The very first designs that DEMAND helped bring to life were those of students at the London College of Furniture. Education, and sharing our practices with the designers of tomorrow, remains a cornerstone of the charity. Most recently we were joined by Josh Lee, a student of Product Design at Loughborough University, and by Annie Mills, from DeMontfort University on work placements.

“One of my stand out highlights was the privilege of working with a young man and his Occupational Therapist to develop his own balance board. Starting with initial cardboard prototypes and then being able to deliver his final product in person! Working with the team at DEMAND develops more than just your skills as

a designer, but helps shape your whole mindset in understanding how to create intuitive and empathetic products for real people.” – Josh Lee

We opened the workshop up to two high school students who joined us for work experience and although the events of 2020 curtailed many of our activities, we were able to welcome Charles Fish, student of Product Design at Loughborough University on a work placement that will continue into 2021. We remain committed to working with young designers to share our expertise however we can in this unprecedented climate.



Please volunteer and help make a difference

As a small team we understand the value that volunteering brings to DEMAND. Volunteers have an important part to play in our aim to help open the doors of opportunity to even more disabled people. Working closely with our skilled designer-makers, volunteers are able to bring different perspectives and varied expertise from different industries, widening the possibilities for projects we can take on.

Jeff, who has been volunteering as part of our team since 2018, brings a wealth of electronics and systems knowledge to the charity and is currently working on a smart version of our Balance Board that will help people with delayed motor development gain important movement skills.

Chris' experience designing car engines is being stretched in a completely different direction as he joins us in creating a new precision-engineered Boccia ramp that will enable athletes to compete at the highest international level with a ramp made by DEMAND.

We're keen to welcome volunteers from all walks of life to be part of our team, to help widen and amplify the benefits we are able to deliver. With the learnings gained from remote working during 2020 we are now confident in our ability to collaborate on design projects with people who may not be able to visit our physical workshop, whether due to long distances or a disability that makes travel impractical.

If you're interested in putting your creativity, design or engineering skills to great use by volunteering with our team, we would love to hear from you. Reach out online at [DEMAND.org.uk](https://demand.org.uk) and get involved!





Building new capabilities and increasing resilience – great things are coming

With 2 in 10 people in the UK considering themselves to be disabled in some way, we know our work can have an even bigger impact if we're able to reach more people. With thoughtful planning, a focus on maximising the impact of each of our designs, making **CoWorkshop** (our dream for an accessible open community workshop) a reality, the impact of our work will reach further than ever.

Our team of 8, bolstered by a few incredible volunteers, has re-engineered the charity and embraced the changes necessary to expand DEMAND's horizons.

Change is never simple nor quick, but it is vital to us being able to develop the products and

services which open the doors of opportunity for another 40 years! We expected a short term dip in the number of positive benefits we were able to generate during this time, but we weren't expecting a pandemic which forced the team to work remotely for a large part of the year, and for all custom equipment projects to be paused in order to keep the team and our clients safe.

We continued to offer our helpline and sign-posting service and to dispatch Floorsitters and Boccia ramps. We focused our efforts on developing products that we have identified as having a wide appeal and 2021 will see the launch of the improved Sensory Shell Chair, Balance Board, Freasel accessible artists easel and many more projects already on their journey from '**One to Many**'. We can't wait to share them with you.

Get our newsletter and see our designs come to life, visit [DEMAND.org.uk/sign-up](https://demand.org.uk/sign-up)

A message from our Chair of trustees

It is rare that charities are bowled such a curveball as we are now dealing with. Social distancing, workplace shut-downs, school closures, and people shielding have forced many organisations to quickly rework tried and tested methods, processes, priorities and services. DEMAND no less so. I am proud of how our small, dedicated team of designer-makers, so accustomed to working closely together both as a team and with clients in a very hands on way, have been able to do so much remotely with such little workshop time available to them.

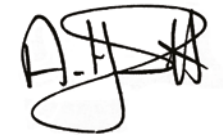
It breaks our hearts that we have had to put so many custom equipment projects on hold, knowing the benefit they will eventually deliver. At the same time we have moved the development of several products which will

benefit many hundreds of people in the coming years, forward significantly. Sometimes we have to look for silver linings and for me this is one.

As our CEO reminds me, the enquiries never stop coming, the project board never gets any shorter nor the challenges we are asked to help with, any simpler. And that's what drives us forward. The demand for high quality assistive technology and equipment is greater than ever and DEMAND is now the only charity in the UK which has dedicated, full time, expert designers and makers able to meet people's needs when mainstream products fall short.

On behalf of the Trustees, I would like to thank the team, our volunteers, our clients, the many Trusts and Foundations, businesses (both local and global), community groups and the individuals up and down the country who support us financially, materially and in kind, who make it possible for us to do what we do and to help us to realise our future plans.

I do hope that soon we will be able to throw the doors of our workshops wide open again and to invite you to visit our wonderful workshop and to learn more about our work.



Anthony Soothill,
Chair of Trustees



Farewell Alan Stokes

Alan joined DEMAND in 1991 and was a larger than life part of the charity for 21 years. Quick-witted and forward thinking, Alan did much to improve the workings of the charity and played a key role in establishing the charity in its first permanent home, The Old Chapel in Abbots Langley. Our thoughts and deepest condolences go out to Libby, Estelle, Oliver and the wider family.



Thanks to our Chair, Anthony Soothill along with our team of Trustees; Robert Mankin, Thomas Mercer, The Hon. Clare Renton, Katherine White and Russell Willcox. Thanks also to our patrons for their continued support and encouragement; Roger Jefcoate CBE DL, Sir John Major KG CH, and The Hon. Caroline Stanley KG CH.



You can make sure our life-changing projects happen. Here's how:

Get fundraising

Your fundraising helps raise awareness of our work and keeps our workshop whirring. Our supporters have enjoyed taking on exciting challenges such as completing the **Royal Parks Half Marathon**. This year, why not take on a virtual or socially distanced fundraising challenge instead? You could clear the clutter at home and donate proceeds from selling your unwanted items on eBay at charity.ebay.co.uk. Make the most of an online shopping spree and select DEMAND as your chosen charity on [Amazon Smile](https://AmazonSmile) and easyfundraising.org.uk. We're bursting with ideas and are here to offer all the support we can, however you choose to fundraise!

Project partners

Businesses, large and small, support us to take on challenges on a larger scale and help even more people. We've got exciting projects on the go and in need of your support, or you may have ideas that would benefit your communities. Let's talk!

Make a donation

Every donation we receive helps to keep our machines moving and gives us the opportunity to help even more. You can leave a legacy gift in your will, donate via payroll giving or make a regular or one off donation in support of our work. Read on to see how you can donate today.

Find out more at
DEMAND.org.uk/get-involved

Your donation changes lives

We receive no government or statutory funding so are reliant on your support to deliver our services. With your help we can offer our custom design service at no cost to the people who need it, and fund the development of designs to help many more people, just like our Sensory Shell Chair.



Online: give a one-off or regular donation at DEMAND.org.uk/donate



By credit or debit card, bank transfer or standing order: call us on **01923 681800**, email info@DEMAND.org.uk or return the form opposite for details



By cheque of CAF voucher: send a cheque payable to DEMAND with the form opposite



Name

Email

Phone


Address

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Your support makes great things possible. What can we do together?

Call us on **01923 681800** or visit **DEMAND.org.uk/donate** to donate today.

You can also reach us by post, simply complete your details overleaf and return this form to us at **DEMAND, The Old Chapel, Mallard Road, Abbots Langley, WD5 0GQ.**

☐ I enclose a cheque or CAF voucher payable to **DEMAND**

☐ Please contact me so I can make a donation by credit or debit card over the phone

☐ Please contact me to arrange a donation via bank transfer or a regular donation via standing order

Thank you for choosing to change lives with us.



We're ready to bring your ideas to life. Reach us at **DEMAND.org.uk**

DEMAND Design & Manufacture for Disability
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