OUR FIRST CONSIDERATION SHOULD ALWAYS BE TO REPURPOSE EXISTING SPACES BEFORE CONSIDERING BUILDING NEW.

A SENSE OF (RE)PURPOSE

Michál Cohen, editor of this issue, explains how transforming existing education spaces can be a hugely rewarding task that has a big impact on learning.

At my practice, Walters & Cohen Architects, we have been designing and transforming schools for over two decades. Even when we started the practice I was keen to embed sustainability into our designs. Now, as the importance of reducing carbon emissions grows, our first consideration should always be to repurpose existing buildings before considering building new.

And this has additional benefits. Creating good learning spaces can be expensive, and many schools don't have the luxury of designing from scratch because they're in existing buildings on existing campuses.

I love these sorts of challenges: making sure that spaces work well (individually and together), look good and meet sustainability, accessibility and heritage requirements is the architectural equivalent of solving a Rubik's Cube, a puzzle and untangling a knot at the same time. Here are some examples of projects I have created with my team in recent years.

The Innovation Hub

Firstly, let's look at Brighton Girls, a visionary client and part of the Girls' Day School Trust (GDST). Our design for its new Innovation Hub meant we were able to do "more with less", creating a series of spaces that gave teachers and pupils far greater opportunities for project-based learning.

We were asked to redesign three rooms in a Grade II listed building and create an area where up to 60 pupils could be taught at any one time.

We couldn't move any walls: that would have required a listed building application and consent, and the project was to be completed quickly and built over a summer holiday.

The largest space is for presentations. Moveable furniture means it can easily seat a large group watching a presentation on the multi-screen display on the end wall. The design allows pupils to divide into smaller collaborative groups by relocating mobile whiteboards.

The two bay windows provide valuable smaller spaces where the furniture creates a sense of enclosure. Nothing in this space feels like a classroom: the pupils love the soft seating, mobile amphitheatre and large kitchen table. It is also a popular social space for pupils and staff, and for parent briefings.

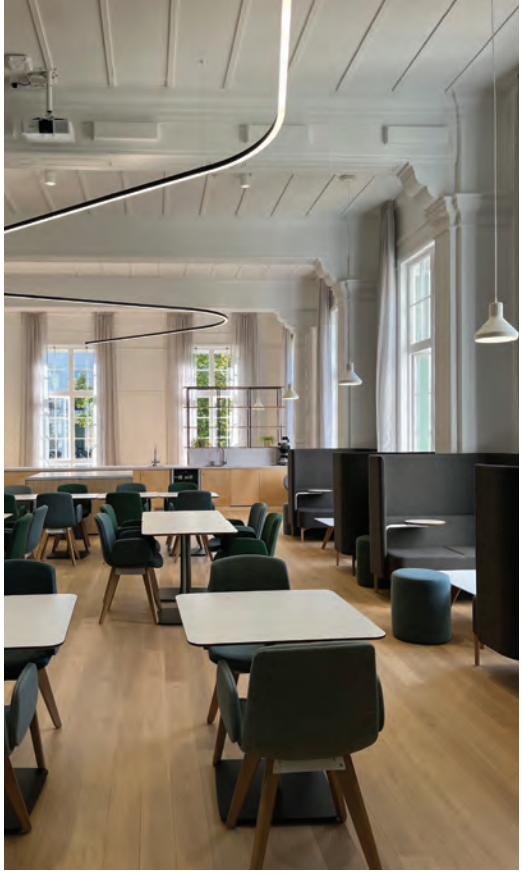
This space leads directly onto a research area with computers and a green screen. A smaller room, it encourages small group or individual work and sits between the presentation space and a maker space, which is for prototyping and testing.

The listed building features wonderfully tall floor-to-ceiling heights, large windows that flood the spaces with natural light, and the bays that allow a different type of collaboration. These would be hard to achieve in modern school design due to constrained costs. This has added to the success of the spaces and made sure that the history of the school is clear for all to see and celebrated in the new design.

Temple – another commission at Brighton Girls

The Innovation Hub project was a big hit, so in 2020 the GDST commissioned us to refurbish three of the school buildings at Brighton Girls: Vicarage, Temple and Montpelier.

Until then the prep school had been in nearby premises, but the school wanted all pupils, aged three–18, to be on the same site as "a family of big sisters and little sisters".



Here I describe the works to the Grade II listed Temple, which has gone through a head-to-toe makeover to provide inspiring spaces on all four levels.

Temple's ground floor: entrance and café

Walk through the front door and you'd be forgiven for checking that you're in a school. In the space formerly used as a library, the main entrance and reception has been re-established with a twist: it looks like a café. Or rather, it's a flexible space that can be transformed instantaneously into a café for events, which is a huge selling point given the school's busy events schedule.

Pupils can study, staff can work, parents and visitors can wait, and it promotes the joy of incidental encounters over a cup of coffee. On a recent visit, we were delighted to see that the girls have blended their own teas in cooperation with a local teamaker, and to meet the building's favourite resident, Pip the dog.

The space is large enough for year-group lectures and parents' evenings and can be used in conjunction with the adjoining library, presentation room and offices. Immediately welcoming, lively and cool, it is not only a wonderful introduction to the ethos of the school, but also very much in keeping with the spirit of the city.

Temple's basement: the music centre

How do you take a dark and underused basement full of lockers, loos and storage, and turn it into a place that inspires creativity? Stripping out partition walls has created large spaces for teaching and performance, full of natural light, as well as five soundproofed practice pods. The central area is both classroom and venue: an acoustic curtain separates it from the circulation route, or can be drawn back to provide an extra area for audience seating.

Temple's top floor: the Sixth Form Hub

On the first floor, underwhelming classrooms have been refurbished to be more uplifting, but a more dramatic transformation took place on the second floor.

Physically and metaphorically at the top of the school, the new Sixth Form Hub is designed as a sanctuary for the older pupils. What was once classrooms is now ostensibly an open-plan space, given different identities by a variety of furniture. Plywood shelving features cosy seating alcoves on one side and a smart screen on the other, subtly separating the kitchenette/dining/presentation area from a more informal space full of sofas, small tables and booth chairs.

The girls took part in workshops with us, exploring

Bolder.
Better.

THE GIRLS TOOK PART IN WORKSHOPS... EXPLORING COLOUR, FURNITURE AND LAYOUT OPTIONS; THEIR THOUGHTFUL INPUT GAVE US A GREAT INSIGHT INTO HOW THEY WANTED TO USE THE SPACE...

colour, furniture and layout options; their thoughtful input gave us a great insight into how they wanted to use the space, which has translated into flexible facilities with a sense of fun.

The buildings were completed in August 2022, ready for the new year. This project epitomises the value in reimagining buildings of poor and deteriorating condition through creative reuse and reorganisation.

Our designs meet the needs of contemporary teaching and learning methods, yet also meet the challenges of working within listed buildings. Structural and fabric repairs protect and preserve the life of the buildings so they are fit for purpose for years to come, and insulating the roof spaces, installing LED lighting, replacing radiators and upgrading the heating system has improved the buildings' sustainability credentials.

While some original windows were retained and refurbished without environmental improvements (on account of their heritage value), the majority were replaced with slimline double glazing. Accessibility has also improved across the site, and biodiverse planting and railway sleeper seating increases the use, value and enjoyment of the outdoors.

This project required an eye for innovative design, but equally important was the enthusiasm and support from a brave client willing to look beyond the concept of the traditional classroom. The staff at Brighton Girls and GDST fully embraced trying something different, and we are delighted to see how much they love their "new-old" buildings.

Making spaces work harder

Alongside refurbishment of historic spaces, it is important that organisations make sure their spaces "work" as hard as possible and are not underused. Even specialist spaces can be designed so they are multi-use.

At Notting Hill & Ealing High School (another GDST school) we were asked to transform a traditional physics laboratory, with fixed central benches, to a more flexible space where both physics and design technology (DT) could be taught. Both subjects had other dedicated spaces in the school, but the DT spaces were not quite sufficient to accommodate the number of students, whereas this physics classroom had capacity.

It was clear from the start that we needed to keep the central space as open and flexible as possible, so a fixed storage wall and services were set around the edges (including gas and water). We took care to include a variety of storage suitable for large sheets of Perspex, card and plastics as well as the equipment required for physics.

One challenge was that the workbenches used for physics were higher than those required for DT and the space was not big enough to accommodate both. We decided that the ideal solution would be height-adjustable workbenches that would work for both disciplines and would be mobile and stackable for easy reconfiguration of the space.

Not just secondary schools

This type of thinking is not solely for secondary schools: we are currently designing a primary school with a specialist space that isn't allowed for in standard Building Bulletins (BB).

We have carved out space to provide a science and cooking facility in the dining area by locating the services along the edges of the space and keeping the centre clear for large dining tables that will also be used for cooking or science. By doing this we also get a small, dedicated dining area, which is not provided for in BB103.

I was also inspired by a visit to the Mandeville Centre, another great example of doubling up the use of space. This project by Architectus for a school in Melbourne

has a teaching classroom in the library. While it is not unusual to have a teaching space in a school library, the simple inclusion of a large, sliding glass door means the space can be used as a completely independent classroom, or for the rest of the time as extra workstations in the library.

These projects have provided wonderful opportunities to repurpose and redesign spaces. To take an underappreciated or neglected space and transform it into something truly useful is immensely satisfying as an architect, but what I really enjoy is being involved in conversations with ambitious and engaged clients who recognise that undergoing these physical changes offers a chance to rethink what they want from their learning environments. It's a privilege that never gets old. ■

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