



Opportunities for Adult and Further Education in Neighbourhoods

co-authored by CIVIC SQUARE, [Material Cultures](#), [Scott McAulay](#), [Architype](#), and [The Anthropocene Architecture School](#)

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Summary

This contribution to the green skills opportunities roadmap and discusses the need for a radical reimagining of adult and further education, the role of colleges in communities and the notion of community empowerment, in the context of climate change.

It offers up some ways to reconsider what we might mean by 'green skills', and the purpose of nurturing these both for and beyond future employment. It recognises the need to repurpose vocational, practical skills in order to shift practices within the built environment and construction industries for the retrofit of our homes, streets and neighbourhoods.

We also offer critiques of current knowledge infrastructures for their failure to look beyond a fossil-fuel and extraction-dependent economy, and propose a shift from a banking model of education to one of ongoing co-learning. At the heart of this, we are encouraging FE Colleges and education institutions to reconsider the role they play in their communities and neighbourhoods and to look at ways they can embed regenerative, restorative, and distributive principles at the heart of their work. We provide examples of alternative learning models and approaches from our work and further afield as well as some questions to consider, designed to support with imagining what could be possible in your context.

Current Context

In the UK we are living in a polycrisis characterised by rising temperatures, vast social inequality, extreme weather events, sea level rise, and biodiversity loss. These phenomena pose significant social and ecological risks to society, including threats to public health, infrastructure, food security, and biodiversity. This is not an intangible experience. Many of us can see and feel it these impacts in our everyday, notably in rising food and energy prices and the ongoing COVID-19 pandemic.

At a global scale, a report from a panel of 278 leading climate experts convened by the United Nations cautioned that the Earth is on a trajectory to exceed 1.5°C of warming since pre-industrial levels - the international

consensus to limit global warming to, and the basis of almost every net zero plan. Across the world many people are already experiencing the impacts of this. And now more likely than ever, those born today will experience a +3°C planet - the basis of which is societal collapse.

We don't endorse or accept this +3°C future, but believe that every decision and action in reducing greenhouse gas emissions is needed. This requires transformative changes at scale and speed across all sectors of society and will require unlocking the agency and potential of many people and communities.

“Everyone has a role to play in the climate crisis”

- Youba Sokona

Neighbourhoods as Critical Sites of Reimagination

CIVIC SQUARE is demonstrating neighbourhood-scale civic infrastructure for social, climate, and ecological transition, together with many people and partners in Ladywood, Birmingham, UK. Principally, we are working to share practically and openly how the climate transition and retrofit of our homes and streets can be designed, owned, and governed by the people who live there in systemic, tangible, and participatory ways.

With over a decade of active research and development, deeply embedded in place, we believe that the scale of the home, street, and neighbourhood act as critical sites of reimagination - where significant agency resides to demonstrate the impact and constitution of regenerative social-ecological systems. A scale small enough to be tangible, impactful, and deeply participatory, legitimate, and relevant to our everyday lives, while also large enough to spread, meet policy, and influence macroeconomic outcomes. This scale of demonstration is considered in relation to the city, regional, national, and planetary scales; not replacing them but rather enriching the dialogue of wider systems-change.

The bridge between further education institutions and the neighbourhoods they exist within can play a critical role in distributing the resources, developing the skills, and co-creating knowledge to embolden civic agency and build capacity. Currently, this connection is hindered by barriers manifesting in various forms,

including regulatory compliance challenges, funding restrictions, liability concerns, administrative burdens, communication challenges, internal policies, and status-quo bias. When emboldened by a deeply radical re-imagination of these power dynamics, the relationship between educational institutions and the communities they serve may offer a critical leverage point within the just transition; a point at which 'green skills' become an opportunity to foster social cohesion, flourish with nature, stimulate local enterprise, and promote educational equity.

The Challenge in Green Skills and Education

The UK government has launched various programs and partnerships with industry and educational institutions to foster the development of 'green skills' across different sectors. However, the current extent of adoption and integration of these skills into workforce training and education programmes varies, and is by no means commensurate to the scale and speed required. We already see a 'skills gap' in transition industries, with demand for workers clean energy and domestic retrofit outstripping those required in oil and gas by 3 to 1 and 77 to 1 respectively. Therefore renewed efforts are needed to not only ensure widespread adoption and effectiveness but also reimagine what 'green skills' mean when facing the prospect of a +3°C neighbourhood at a systemic scale.

"Almost half (46%) of young people had not heard about green jobs during their education, and this was substantially higher for NEET young people (64%) and young women (61%)."

Princes Trust

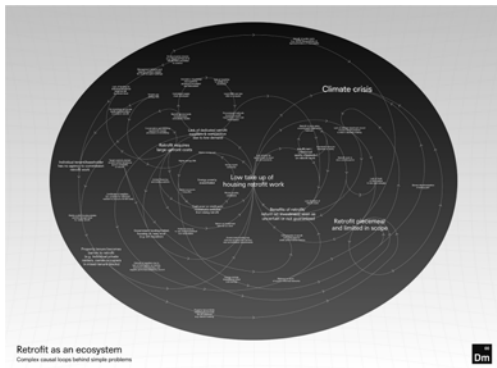
Challenges in the Built Environment & Retrofit

We frame the built environment as an enabling infrastructure for a transformative climate transition, not just as a pragmatic position but as an imperative one. At present, approximately 40% of UK carbon emissions are linked to the built environment, with the construction sector generating around

60% of waste produced in the UK. These statistics, although stark, are a reminder that if we intend to inhibit the progress of climate and ecological breakdown, and work to avert a +3°C neighbourhood, we must radically overhaul the procurement, governance, and skills embodied within the reproduction of the built environment.

Since the industrial age, built environment practice in the Global North has been overwhelmingly dependent upon the systemic extraction and overuse of natural resources - typically extracted from, and at the social/ecological cost of, the Global South. It is tempting within this context to advocate for any alternative that promises a more 'green' future - but it is important to acknowledge how such initiatives are often appropriated to reproduce the same extractive and unjust conditions they claim to address. For example, built environment 'green skills' are widely packaged within dominant narratives of an energy transition that remains resource-hungry, energy-intensive, and dependent on exploitative and unjust supply chains. To this end, built environment practices often utilise a carbon tunnel vision to justify their increased levels of embodied energy and resource depletion, foreclosing further analysis of their impacts on wider planetary boundaries.

In acknowledging these challenges, there is an evident need to assess 'green skills' against far more ambitious metrics to capture their real cascading impacts within contexts of supply chains, material extraction, and embodied energy. This involves developing and utilising holistic frameworks that capture the built environment's impact on a broad range of social and ecological conditions; from energy consumption and waste generation to biodiversity preservation and freshwater consumption and beyond. There is a growing body of work that visualises this complexity and identifies opportunities for effective and holistic interventions in the built environment, notable examples include the below analysis from Dark Matter Labs as well as the Doughnut for Urban Development.



Retrofit as an Ecosystem
Image by Dark Matter Labs



Cascading Impacts of Poor Quality Housing
Image by Dark Matter Labs

Utilising such tools and frameworks, we can identify key areas of intervention that move beyond mitigating negative impacts to instead work towards built environment practices that are regenerative to social and ecological conditions. Retrofit, repair, maintenance, and landwork (amongst other practices) represent fertile sites to expand our regenerative design capacities and create truly 'green' skills for a just and distributive future. Through this framing, we acknowledge and find opportunity in the entanglement of the environmental, social, and economic factors that shape our built environment and its impacts.

Perhaps paramount within the shifts necessary to built environment practice is the emerging role of retrofit as a central skill for the future of our homes, streets, and neighbourhoods. Retrofit has the potential to sit at the heart of a built environment transition, connecting to everyday experiences of health, biodiversity, transportation, and beyond. The most significant challenges within the existing retrofit sector are interwoven with the challenges of the wider built environment sectors: namely an enduring reliance on materials derived from petrochemical or carbon-intensive production; insufficient public funding and procurement governance; a lack of technical built environment literacy and agency within neighbourhoods; and a lack of skills, knowledge, and regulation to deliver retrofit effectively and ambitiously.

Within this context, the potential for educators and adult education institutions becomes clear - the provision of retrofit skills founded upon a nuanced understanding of how built environment practices impact all planetary boundaries and social outcomes. This will require the development of learning programs that necessarily do not follow paths of least resistance; the cheapest and most widely available materials and methods will typically not be the most effective choice in the contexts we have outlined. As such, the problem space

we believe holds the most potential for educators to lean into within this context is development of 'green skills' rooted in natural material retrofit, repair, and maintenance of the built environment.

Challenges in our knowledge and learning infrastructures

As we seek to map out the opportunities for local communities for developing green skills, we must first take into account that the vast majority of our learning and knowledge infrastructures today are borne out of and continue to function in service to our incumbent fossil-fuel and extraction-dependent political economy.

As noted by [Economist Kate Raworth](#), this 20th century model in which the climate and ecological crises are considered mere 'externalities' in the pursuit of exponential economic growth is not fit to fix the same crises that it has caused. Where the incumbent paradigm narrowly values learning as a pathway to economic productivity through the means of employment through a "depositing knowledge in learners" approach, the magnitude and intersecting nature of the cascading [polycrisis](#) requires us to fundamentally and systemically reimagine ourselves as stewards of our planetary household.

We position the importance of infrastructure, ecological health and socioeconomic conditions - all key sites of cascading and compounding climate change risks - to help illustrate why Further Education Colleges must approach their future strategies for 'Green Skills' in the most ambitious and radical ways possible, taking a transformative posture and looking towards their neighbourhoods as sites for collaborative learning and knowledge exchange.

In order to achieve this, the model of education must change from a banking conception, to one of ongoing co-learning in a changing neighbourhood and planetary context. This shift requires us to rethink how we use current, and how we create new, civic and social infrastructure to facilitate ongoing learning, training and re-skilling.

Opportunities for FE Colleges

"The unfinished character of human beings and the transformational character of reality necessitate that education be an ongoing activity"

- Paulo Freire,
Pedagogy of the Oppressed

We call on Further Education College leaders to look beyond green skills as a discrete category, and rather to embed regenerative, restorative and distributive by design principles at the heart of their work. One deeply radical, strategic opportunity we envision is the repurposing of educational infrastructures to be about creating the capacity for people to be able to work together in place. To enable life-long learning, transferrable across personal and professional contexts, with a particular focus on the productive capacity required to transition their homes, streets, and neighbourhoods through the polycrisis.

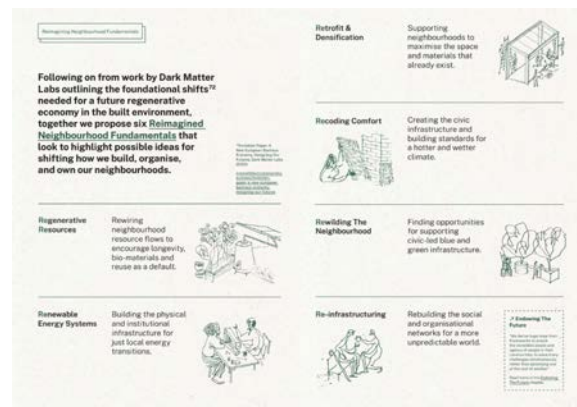
This involves forecasting the skills and knowledge that will be needed to effectively navigate and mitigate the challenges posed by the crisis of +3°C, as well as recognising the productive capacities which already exist within neighbourhoods. This approach will require educational infrastructures take into consideration the relationship between institutional knowledge and the embodied, non-institutional knowledges and epistemologies that exist within communities moving towards a relationship that affirms and ennobles these existing capacities in ways that do not other or disenfranchise.

With significant amounts of existing real estate, resources, infrastructure, green spaces etc., there is an incredible opportunity for assets that colleges have available to them being made more available to communities and civic organisations who are already creating ways forward. This would be co-beneficial. In many communities, there is a need to incubate organisations that have the potential to serve as catalysts for positive change and innovation. In return, these organisations could play a crucial role in deploying relevant skills and contextual knowledge into the colleges. By supporting and nurturing such organisations, it becomes possible to create an ecosystem that can respond to the complex and interconnected challenges faced by neighbourhoods.

By subverting the spatial relationship of institution-to-neighbourhood, the assets owned for the institution can become live projects, with the site itself

becoming a classroom, incubating the capacities required in iterative, co-created processes. The necessary maintenance and upgrade of institutions' physical infrastructure can be imagined as a recurring opportunity to practically implement green skills and be used for deconstruction, retrofit or repair.

Approaches & Examples from CIVIC SQUARE



1). Strategic Reorientation in 3°C Neighbourhood

We are now working to reorient and reposition our work and longer term strategies for transition within a deep understanding of the current risks UK urban neighbourhoods face over this century due to climate and ecological breakdown under a high emissions scenario, the likely result of which will be a rise in average global temperature of 3°C. We recently, published a new piece of research on 3°C Neighbourhood as an open source, reflection and proposition about the time we are in. Conducted alongside Dark Matter Labs, we outline six foundational shifts that must be addressed within neighbourhoods. Each of which opens up a multiplicity of opportunities for further education institutions to become important, embedded public assets. We offer this up as a resource for for college leaders to reflect upon ways they might strategically reorient the role they will play in our neighbourhoods in this context.

[Download full 3°C Neighbourhood research paper](#)

2). Underpinned by an Ecosystem Approach

Whilst we focus specifically on our work, starting with humility from where we are, we invite and recognise that we can only thrive when there is collective investment and plural approaches beyond one organisation. Therefore we situate our work within a wider ecology through which we are continually exchanging learning and practice at many different scales. The following examples from our work illustrate some of the approaches that have the potential to help reposition the role of further education colleges and institutions, both in their neighbourhoods for the purpose of adult and community education, and as part of a wider ecology.

Example 1: Neighbourhood Trade School



Neighbourhood Trade School is the beginning of a school for transition at the neighbourhood scale to exchange the wisdom of our places and democratise access to the skills we need to design, own and govern the climate transition and retrofit of our homes, streets and neighbourhoods.

Our Neighbourhood Trade School model was adapted from the Trade School Coop, which was a non-traditional learning space that operated through barter, mutual aid and reciprocal exchange. From 2009-2019 Trade Schools were organised in many locations around the world by local grassroots organisers who were exploring and practicing the principles of a solidarity economy. Through this work, they evidenced the need and desires from communities for spaces and platforms to disseminate knowledge and information in casual, safe, and judgement-free environments, accessible to everyone in the community.

In Ladywood, Birmingham, we have established and continue to develop a weekly convening of Neighbourhood Trade School classes, taught, hosted and led by the people who live locally. The model surfaces, recognises and affirms the latent skills, knowledges and wisdom of local people and works to discover, nurture, unlock agency and create spaces for people to experience first hand the power of working collectively to take care of each other in difficult times.

Alongside this, we are also working to introduce curricula of practical, applied, specialist skills for the retrofit of our homes, streets and neighbourhoods. Drawing upon the expertise of partner organisations to share techniques, from domains such as renewable energy, building and construction and more with a view for learners to put these to use where they live, shaping the design, ownership and governance of their places.

As we continue to develop CIVIC SQUARE as a demonstrator of neighbourhood scale civic and social infrastructure for climate transition, our role is to facilitate access to the physical space, tools, resources, and organising systems that enable people to participate, removing as many barriers as possible.



Questions to Consider

- How might FE Colleges and institutions partner with or resource local community organisers to facilitate a Trade School in their neighbourhood?
- What role could access to assets in the form of physical space, tools and equipment play in resourcing such activity locally?
- What pathways towards further learning particularly in relation to green skills could be created through the development of such a community?

Example 2: Peer to Peer Learning Journeys





Learning together as peers allows for more horizontal structures, with everyone having skills, wisdom, knowledges, histories, ideas and more to bring into the round. Everyone has something to learn and something to contribute.

Critical for field building, we want to nurture relationships and exchange between peers rather than simply teacher and pupil dynamics, as well as recognising the plurality of ways in which we all learn, and what it means to learn together, co-created with people in their places and not from a central point of learning. Rather than do our work and then reveal it to the world, we want to grow this ecosystem together, through peer learning models, learning out loud and together.

To date our peer learning has included reading circles, as well as dedicated Learning Journeys with over 120 peers across the globe joining the Doughnut Economics P2P Learning Journey for over a year, alongside DEAL and Huddlecraft. 34 peers also joined the Ecological Health in Neighbourhoods programme over 9 months, alongside Centric Lab and Centre for Alternative Technology. Through these programmes we have seeded and nurtured the visions and practices of many to take action in their various contexts. We have recently launched a learning journey deeply connected to our Neighbourhood Trade School with a focus on Skills for Transition that aims to fundamentally reimagine our relationship to Materials and the systems that govern their production, distribution and end-of-life through a lens of material justice. Material Matter[s] is an example of a hands-on practical skills based learning journey oriented towards regenerative material transitions of our homes, streets and neighbourhoods to support a socially just and ecologically

safe planet for all life.

Structures for Peer to Peer learning enable the reciprocal exchange of real time learning held together by a shared learning enquiry or field of interest, for example, our Doughnut Economics Learning Journey brought together practitioners who were interested in new economic possibilities, fundamentally reimagining the purpose of economics for the 21st Century. Our Ecological Health in Neighbourhoods brought together people who were interested in combining visionary praxis or ecological justice, futures and health justice with how we practically organise in our homes, streets and neighbourhoods.



Questions to Consider

- What could peer to peer learning journeys look like for further education college leaders, tutors or professionals who would like to explore ways they could fundamentally rethink their role of colleges as learning infrastructure in communities and take radical action commensurate to the scale of the challenges we face?
- How might these models be designed to support further education colleges and institutions to build new relationships and partnerships that open up opportunities for alternative learning and practice beyond business as usual?

Example 3: Bold Imaginative Convening



With the hope these moments serve as a call to action with deep boosts of hope, we gather thinkers, doers and visionaries from across the neighbourhood and beyond to convene and co-design a more connected future, where economic and social realities can be imagined. For example our Regenerative Neighbourhoods and Retrofit Reimagined Festivals. Together they share bold ideas, often over food, where other tools such as book talks, workshops, film screenings, creative workshops, festivals and so on help to bring very early bold, emotional responses into a space where the future can be tangibly imagined conditions created for the relationships and connections between people and ideas that enable us to organise to emerge.



Questions to Consider

- What ways might your college convene your community around bold imaginative ideas for our futures, that reimagine the ways learning could happen around green skills?
- How might these experiences be designed in a way that they become irresistible for the college community to participate in?

Example 4: Beyond Schools



Intergenerational approaches to learning weaved into the fabric of everyday neighbourhood life, Beyond School is a lens or approach to thinking about what education and learning centred around justice, safety, autonomy, reciprocity, newly imagined economic possibilities and community on the neighbourhood

scale could look like. Inspired by the space for imagining and agency facilitated by Beyond Books. We have done this by hosting weekly after school clubs in two local schools, recurring holiday clubs across summer and half term holidays, and continued this approach through intergenerational weekly Neighbourhood Trade Schools, where we approached our neighbourhood as a classroom, where learning can happen anywhere and everywhere.



Questions to Consider

- What opportunities are there to create learning experiences that weave into the fabric of everyday neighbourhood life beyond the traditional 'professional working hours' and in partnership with schools and community groups near to you?

Wider Educational Examples



Todmorden Learning Centre and Community Hub (TLCCH)

<https://tlchub.org.uk/>

Todmorden Learning Centre and Community Hub (TLCCH) is the community group which now runs Tod College. The building, formerly Todmorden Community College, was transferred to the Community Benefit Society from Calderdale Council in the Spring of 2021. The transfer came after 5 years of campaigning, and fundraising by the community to save the building from being bulldozed.

The centre aims to create a community space for the benefit of the people of Todmorden. It now offers a rapidly growing range of provisions for local people and community groups including opportunities for learning, sports facilities, office, studio, and workshop spaces.

With a focus on providing local young people with the learning and skills they need for jobs in the new green economy, the college is establishing a new 'Climate Challenge College (CCC)' as a faculty within Tod College. The CCC's practical skills training covers natural building, agro-ecology, retrofit and renewable energy systems, and is open to the whole community (see more: <https://tlchub.org.uk/climate-college/>).



Black Mountains College

<https://blackmountainscollege.uk/about/>

A further and higher education organisation founded as a direct response to the climate and ecological emergency, Black Mountains College recognises that education is central to understanding our current situation and preparing for a different kind of future.

They centre experiential learning models across all their courses and have a range of vocational learning opportunities many of which are made available for free in order to broaden access,. Their learning models work to integrate the head, hands and heart, multi-sensory protocols, outdoor learning and multiple hierarchies of knowledge or ways of knowing.



MC Make

<https://materialcultures.org/make/>

Material Cultures are an architectural practice who bring together design, research and strategic thinking in service of a post-carbon built environment.

In recognition of the significant skills gap in the UK and the lack of technical and skills required to transition to a low carbon construction economy, their learning platform MC Make foregrounds practical and accessible construction skills, running education programmes and courses to build capacity in construction skills for the green economy. At the centre of the project are hands-on workshops, led in partnership with material specialists from across the UK.

To respond to wider societal disparities, such as the under-representation of many perspectives within construction and architecture; 50% of the MC Lab workshops are led by women, and to date a quarter of the places have been made available at subsidised rates to ensure access for people who are economically discouraged from professional growth opportunities like this.



Antiuniversity

<https://antiuniversity.org/about/>

Antiuniversity Now is a collaborative experiment to challenge institutionalised education, access to learning and the mechanism of knowledge creation and distribution.

Initiated in 2015, Antiuniversity Now was set up to reignite the 1968 Antiuniversity of London with the intention to challenge academic and class hierarchy and the exclusivity of the £9K-a-year-degree by inviting people to organise and share learning events in public spaces all over the country.

Antiuniversity events are open to all to organise and attend, regardless of experience, background, age or qualification, and they take any form in any location. They are free to participate in, accessible and inclusive using non-hierarchical, participatory and democratic pedagogy and are firmly rooted in creating and sustaining safe autonomous spaces for radical learning that follow, nurture and enact intersectional inclusive values.