Welcome to the 'Product Design' bridging task

Carefully read through to make sure you understand the requirements as you will be expected to hand this work in during your first lesson back in September.

Task 1: Read & Respond to current ongoing D&T issues

This post is part of Gensler's ongoing exploration of 'How design has responding to the COVID-19 pandemic'.

How the recent Pandemic could reshape the World's Cities for the future June 30, 2020 |
By Ian Mulcahey

Throughout the lockdown spurred by this pandemic, I have been able to access one of the great glories of Victorian urban planning — Alexandra Palace Park in London. My local park was planned and provided at the height of London's industrial boom in late the 19th century. A philanthropic attempt to protect the natural rural landscape from the encroaching city and ensure that the thousands of newly built terraced houses would all have permanent access to generous open space. Fresh air, sunlight, exercise, and entertainment were all regarded as central to ensuring healthy well-being. Victorian doctors, planners, and developers had long recognised the benefits of access to open space as an essential component of the new industrial city.

As we emerge from lockdown and I look out on London's skyline crowded with high rise office towers and new residential apartments, I reflect on how the scourge of this pandemic will shape the city in the future. We have already rediscovered many things we were in danger of forgetting, the value of simple trees and grass, silence, and the sound of the birds and insects. The roads were silent, the planes were gone, but the parks, gardens, and balconies hummed with life.

The challenges the world is facing and the implications they have for the urban landscape present a moment to reassess and redefine our communities and our cities. We have an opportunity to provide a more fulfilling urban experience and to design for health, equity, and accessibility.

Here are three lessons for the planners of our future cities:

Make sure that every citizen of our city has equal access to shared public space.

Good quality and well-functioning green space need to be at the heart of every community. As the population rises so should the available, usable open space. The allotment, the urban farm, and the natural woodland are an essential complement to the garden, the square, and the park and should all be part of our "essential urban infrastructure."

Public spaces support the widest diversity of experiences and offer some of the best experiences overall, according to Gensler's **Experience Index** research. Additionally, **urban green spaces can improve air quality and thermal comfort**, while providing proven mental and emotional benefits. Especially in times of crisis, parks and other public spaces can be used to promote health and well-being and strengthen communities.

Also, it's important to recognize that **not everyone has easy, equitable access to green open space** in their city. Under-resourced, low-income neighbourhoods often lack access to safe public spaces where people can exercise, relax, or socialize, and the current pandemic has highlighted this disparity. To extend the public realm, planners should engage traditionally underserved communities and listen to their concerns in order to create more inclusive, equitable public spaces for all.

Reimagine our cities to plan for how we will live and work in the future.

The enmasse (in a group; all together) shift to remote work spurred by this pandemic has shifted work patterns. The need to endlessly commute to and from the centre every single day is no longer required for many and are no longer the norm. Planners may need to rethink how our cities can respond to these changing lifestyles and behaviours.

We need to rethink our cities not simply as a core Central Business District with outlying residential estates, but more as a city of living and working villages, each with its own definable community. Each village should be a self-sustaining entity with its own employment, school, shops, and leisure and open space. We need to now plan for the way we will live and work in the future.

Don't let things go back to the way they were.

Despite the disruption that the COVID-19 crisis has brought to the global economy and people's lives and livelihoods, the pandemic is also having unintended benefits. The pandemic is expected to cause the biggest fall in CO2

emissions since World War Two, according to the World Meteorological Organization. But unless we take significant climate action, these changes may be short-lived.

The closure of streets for walking and cycling, for example, has been a well-established trend over recent years to improve air quality, noise, and provide a healthier environment. **Cities like Paris** have announced plans to keep older cars out of the city after lockdown in order to curb air pollution, phasing out of car lanes and parking spots to create wider sidewalks and greenery. Such resilient local planning could have a far-ranging impact on cities.

During the pandemic, we have changed the commute, we have reclaimed the streets, we have cleaned the air, we have reduced the CO_2 emissions, and we have silenced the airport. And importantly, we have rediscovered the value of green open space and the central importance of community.

Whether these changes have a lasting impact will, in large part, depend upon what the planners of our future cities do now and next. We must create more walkable, liveable cities with new forms of mobility and ample public space that is inclusive and accessible to all.

We can take the lessons learned from this transformative moment and apply our collective creativity and ingenuity to redefine the future of our cities. Now is the time to rebuild, recover, and plan for more resilient, self-sufficient urban landscapes.

Part 1: Answer the following questions

1. What have humans rediscovered about the natural environment in urban settings that we took for granted pre-COVID.
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2. How has this been possible?
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3. Which public spaces have been used more than would have been usually in recent decades and why?
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4. How can we retain and improve our built environment to hold on to these new changes when redesigning our cities and urban landscapes for the future?
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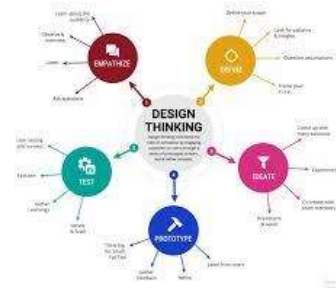
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Part 2: Complete the following design task

1. Investigate the pandemic as a context (brainstorm) *Examples*

2. Choose a product that has
   become very much a part of supporting the fight to reduce the recent spread of COVID-19 viruses.
   Examples: *Face masks, visors, gloves, hand sanitiser containers, dispensers, infrared thermometers, shields,*
   interactive information pods/ screens and 'safe key no touch tools.

3. Then analyse **(study)** this product as fully as you are able to. Ideally it needs to be a product that is readily available to you throughout the task and preferably one you can disassemble if possible (please do not worry if this is not possible).

4. Research the following in relation to the chosen product:
   - Usability (e.g. function, ergonomics)
   - Manufacturing (e.g. material choices, commercial/ industrial processes)
   - Sustainability (e.g. Life Cycle Analysis – LCA)

5. Using the research carried out by you, redesign the chosen, existing product making at least 5 obvious improved changes.

6. Record all iterations through visually and thoroughly using a range of communication methods, such as; hand drawn and computer sketching, block and functional modelling. (e.g. 2D design, sketch Up Pro, Tinker CAD, AutoCAD, Photoshop etc).
   Ensure that you include user feedback, reviews, testing etc in both your research, analysis, designing and prototyping phases as this will be essential to your transition from GCSE to A Level, where you are required to evidence, explain and justify all design actions, giving the views of real users and consumers.

7. Please present all work (preferably) on A3 sized paper. Carefully think how best to illustrate your research analysis and designing and aim to do this in '*real time*'.
   '***Real time*'** refers to you capturing your thoughts, activities and ideas at the moment they happen and not thereafter the event (superficially).
   This is an important factor as the exam board is explicit that they expect and will only award real time designing.

Happy researching and designing…