Assessment 1 – Blog 1

ECGE4006P: Contemporary Challenges – Making a Difference

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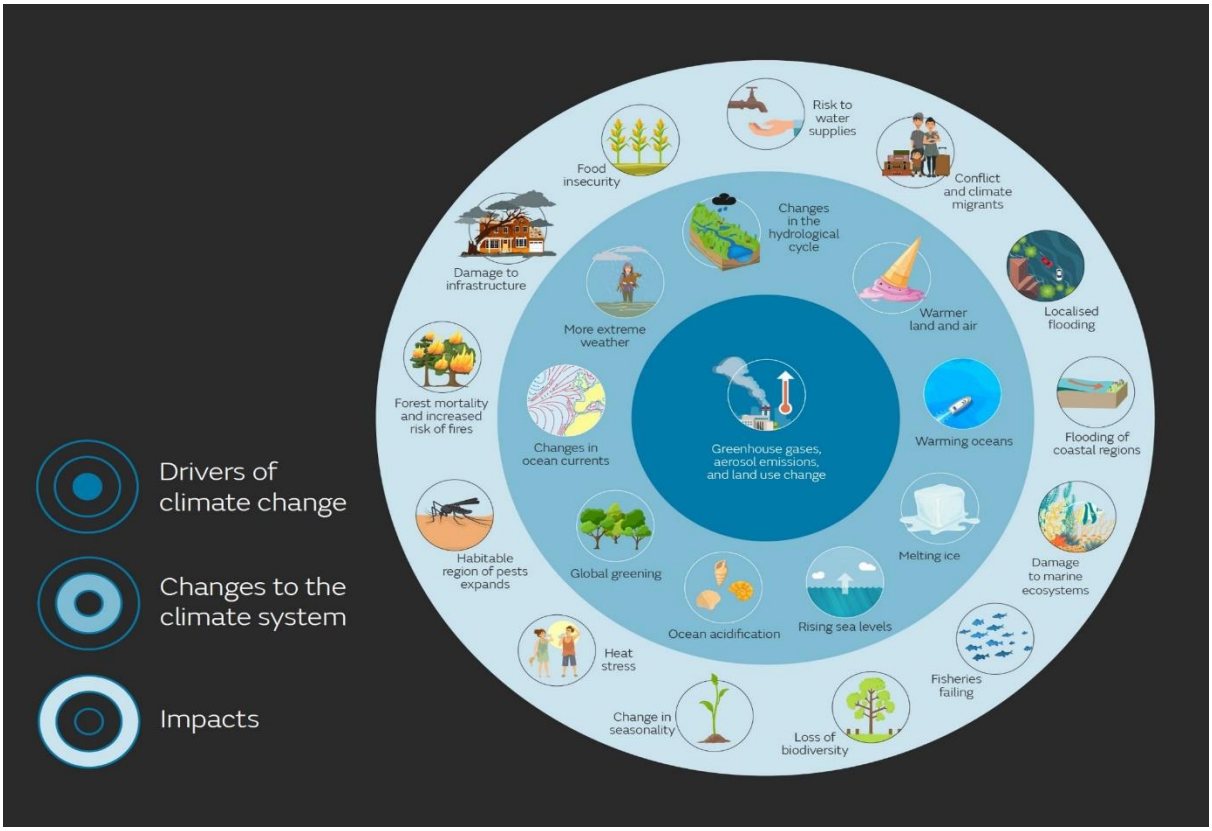
Climate Change – the biggest threat to humankind?

What is climate change? Climate change refers to long-term changes in temperatures and weather patterns (Met Office, 2018). It has been suggested that humans are the cause of global warming and climate change (BBC News, 2021). Fact or myth? I will leave you to think about that. However, evidence indicates that we are to blame. What is the evidence you ask? Well, according to the Intergovernmental Panel on Climate Change, there is a more than 95 per cent probability that human activities over the past 50 years have warmed our planet (IPPC, 2023). Human activities significantly impacting today's global society include health, food, water, and energy. How did we get here? One argument is that many effects of climate change are distant from most people. There are a variety of factors that make it challenging for people to get motivated to address the issue. One factor is compromise, giving up short-term benefits to gain long-term benefits (Markman, 2018). This is known as a present bias, meaning there is uncertainty about the future (King, 2019).

Instead of driving, take public transport, share a car, or ride your bike. Choose what you eat more carefully. Could you even grow your own? Does it have plastic packaging? If so, can it be recycled to produce more energy? Do you waste food? Think about the power you use in your home creating carbon emissions. Do you have solar panels? If not, why? Have you investigated investing in renewable energy? Use reusable bags instead of plastic ones. All these significantly impact climate change while sacrificing the quality of life of future generations (Greenpeace, 2021).

Scientific evidence from natural sources such as ice cores, tree rings, ocean sediments, coral reefs and rocks clearly shows that the global temperature is rising which is severely impacting society and ecosystems (BBC News, 2021). This has resulted in increased fires. The ocean is getting warmer, and acidification is increasing. Ice sheets are shrinking, and glaciers are retreating. The sea level is rising. Arctic sea ice is declining. We must act now before it is too late. Extreme weather events such as flooding, heat waves, hurricanes, and storms are increasing in frequency and intensity. This generates a threat to humans as it poses a danger to crops such as wheat, corn, and rice. Plants and animals are losing their habitats (United Nations, 2021).

Here we can see the causes of climate change and the impact that it has on the climate system.



(Met Office)

In 2015 The Well-being of Future Generations Act (Wales) was established. This involves improving the social, economic, environmental, and cultural well-being of Wales (Gov.Wales, 2015). It works to ensure problems are prevented such as climate change, ensuring that public bodies think more about the long-term impacts on their decisions using a more combined approach, collaborating with people and communities.

Do you have children or grandchildren? We need to act now and reduce our carbon footprint by generating less greenhouse gas emissions, bringing the future mentally close, and enabling us to be motivated to act otherwise there will be disastrous consequences for the future generation (Save the Children, 2022).

This is a global climate emergency

In conclusion, it is clear to see that Climate change is not a straightforward issue. It is evident that children need to be educated while they are young, showing them the link between human activity and climate change. It needs to be embedded into their curriculum. We can make positive changes to help tackle climate change by changing the way the global economy is organised and governed. Everyone has a part to play. Climate change is the biggest, most pervasive threat to humankind (Met Office, 2018). We must all work together to address this crisis. This is a ticking time bomb, and we must act NOW! Before it is too late.

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Dealing with threat - how do we deal with climate change in education?

> **Many people believe that climate change is a future problem. What do you think? Evidence suggests that human-caused climate change is the biggest environmental crisis of our time (BBC News, 2021). We are the last generation that can do something about it so why are we not taking greater action? To successfully promote and deal with climate change we must all work together to educate children to have a sense of belonging and become responsible and active global citizens. Children need to take an active role in facing and resolving global challenges and become proactive contributors to a more peaceful, tolerant, and inclusive world.**

What is a global citizen? What skills do we need to be successful in dealing with climate change in education?

Education for Sustainable Development and Global Citizenship (ESDGC) involves things we do every day, what could be simpler? It helps promote a better understanding of and solutions to climate change using a whole school approach. Let us inspire our children to help save our planet and help them to understand the impact of their choices on other people, the economy, and the environment. Give them the desire and ability to work actively to make a difference in the world by enabling them to develop core competencies. ESDGC is embedded across the curriculum involving everyone including the local community, yes you! We can give our children the knowledge they need to be successful. Integrate sustainability into teaching. Education is key as Nelson Mandela (1918-2013) said in one of his most famous quotes "Education is the most powerful weapon you can use to change the world" (1990). It provides interesting real-life experiences which children can relate to preparing them for life in the 21st century without compromising the ability of future generations. Eco-Schools, Healthy Schools, and Fairtrade all contribute to ESDGC (Eco-Schools, n.d.). Our children can experience a greater connection to

nature, with opportunities to have hands-on experiences. Let us increase their access to the outdoors. Let them prepare food, cook, and grow fruit and vegetables. We will challenge them to see how they can contribute to the lives of others. They will be able to make links between local, national, and international issues aiming for equality across these areas (Adran and Oes, 2008).

OUR CHILDREN ARE IMPACTED BY THESE EVENTS!

Our children have individual needs in climate adaptation, mitigation, and recovery processes. Is your child worried about climate change? Climate disasters can have a significant effect on their lives causing them to become anxious (Crandon et al., 2022). We need to give them the

opportunity to be actively involved by teaching them to become ethical informed citizens (Gov.Wales, 2020). This helps to promote resilience. We all have a part to play. We are their role models so if we are not seen to be acting why should they? Therefore, giving them no hope for their future, is this what we want? We must be truthful whilst still offering hope. In a media-filled world reminders of climate change and misinformation are occupying the news, social media, and the social environment around them (Kennedy and Gislason, 2022). If we want a safe future for our children, we must educate them now!

A picture is worth a thousand words

(envpk.com)

We cannot stop global warming, but we can help slow it down. We must develop children's awareness of contemporary challenges and rapid changes in our environment before it is too late. It is of paramount importance that we educate our children to reuse, recycle, switch off taps/lights and walk to school (Trust, 2021). Just by doing these things, I believe that we can help reduce global warming. The ball is in your court!

I will leave you with this image; if it makes you feel uncomfortable, IT SHOULD!

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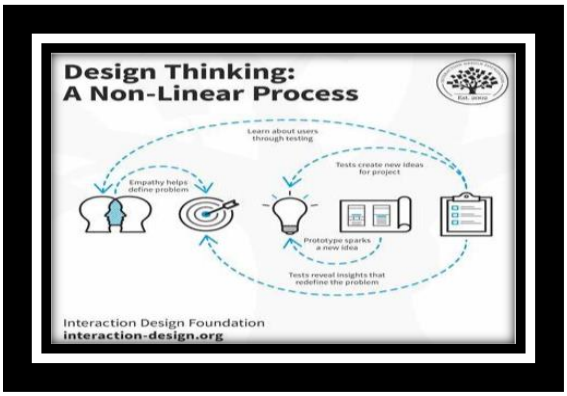
Design thinking

What is design thinking I hear you ask? It is a mindset that helps creative thinking and problem-solving. It is an ongoing process where you aim to understand your users, challenge opinions, reassess problems and create different solutions. We live in a rapidly changing world that has become increasingly interconnected and complex (McKinsey, 2023).

A case study at Manorfield Primary School in Tower Hamlets engaged an architect to design a model classroom that would put teaching and learning at the centre. Everyone worked together on an idea. If the idea worked, it would become a lab where they could test things and roll it out elsewhere. The children visited hotels and offices to get design ideas and then reported their ideas back to the architect. The result was the transformation of a previously cluttered classroom into a modern, light, and airy space where they now apply the lessons that they learnt to the conversion of two redundant offices into a new, inspiring Key Stage 1 library area. They used outside expertise to challenge their thinking. By involving them in the shaping of their environment, their opinions on high-level decision-making were validated. When learning consists of both the classroom and real-world scenarios, creativity can really blossom as children see the real-life effect of their decisions (Diaz, 2022).

Education can support children to develop scientific and environmental knowledge, creativity and critical thinking skills needed to create and evaluate responses to climate change. Design thinking allows children to think outside the box and enables alternative ways of thinking. It may interest you to know that top brands such as Apple and Samsung have embraced the design thinking approach.



Climate change is a complex issue and the need for innovative solutions has never been needed more. There is no one solution. It also is not about finding a solution; it is about identifying the problem you are trying to solve. Let children make mistakes. According to Sir Ken Robinson (1950-2022), if you're not prepared to be wrong, you'll never come up with anything original (D'Silva, 2012).

I am here to tell you why design thinking complements climate change. It can be applied in many ways and is the best approach to creatively solve issues surrounding climate change and sustainability. It allows children to have an open mind, welcoming innovative ideas. They can question current methods and think about how to improve them. Its aim is to understand our climate issues and allow children to produce innovative solutions (Na, 2023). Design thinking skills can be established through different activities at school, such as group work, and projects. A must-have for design thinking to be successful is teamwork and communication.

So, let us cut to the chase...Would design thinking in education help us to tackle climate change? Yes, I am confident that it will. Let us have a look at the merits of design thinking:

1. **Helps children develop creative confidence and use their imagination**
2. **Develops critical thinking skills and their ability to think divergently**
3. **Improves the education system**
4. **Helps prepare the next generation of leaders**
5. **Builds a more resilient and adaptable society**
6. **Promotes resilience**

Shortcomings that could cause a problem for design thinking for teachers are:

1. Insufficient resources
2. Lack of experience/training
3. Insufficient time

For children:

1. Confusion/frustration
2. Lack of creativity/good ideas
3. Teamwork challenges

(Scirp.org, 2022)

The merits outweigh the shortcomings, right? I agree that design thinking, often referred to as a great tool to be used in education, is essential to educating children in the 21st century. Children are at the forefront of calling for action. Design thinking offers a means to confront these changes in a human-centric manner (Dam, 2022). Let us inspire everyone and do this together!

It's a game-changer!

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