

# Visual Displays of the Sustainable Development Goals in the Curricular and Extra-Curricular Activities at Nottingham Trent University—A Case Study



Vanessa Odell, Petra Molthan-Hill, Lina Erlandsson and Eleanor Sexton

**Abstract** The United Nations' Sustainable Development Goals (SDGs) have been fully embedded into the formal and informal curriculum of Nottingham Trent University (NTU), United Kingdom. In order that staff and students can recognize the 17 goals and 169 targets, visual displays have been used to act as cues and content providers in curricular and extra-curricular activities. This paper summarizes the different approaches taken to display the SDGs visually at NTU. All taught courses/programmes at the university address at least one of the SDGs and have the option to include their chosen SDG as an icon in both physical and digital course materials. Extra-curricular activities include the creation of thought-provoking installations of the goals around the estate, for example demonstrating the vast amount of plastic bottle waste contributing to ocean marine debris (SDG 14, target 1) linked holistically to competitions and workshop activities targeted at raising insights of staff and students and changing behaviour. This paper will offer detailed descriptions of the displays created at NTU, for example as part of Green Week and how these can be easily replicated at other universities. The paper will, therefore, be of interest to anyone aiming to adopt visual approaches to communicating sustainability messages in curricular and extra-curricular activities.

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## 1 Introduction

The purpose of this chapter is to give new and significant insight into the use of visual aids to engage staff and students with the United Nations Sustainable Development Goals (SDGs) in the curriculum and extra-curricular activities carried out at Nottingham Trent University (NTU). Using extra-curricular visual displays, is both a dynamic and delightful way to raise awareness, contrasting the traditional style of having a stall which allows learning to be extended outside of the classroom. Visual aids and displays in teaching are not a new concepts, in 1973 Horn described that students were “perpetually confronted, enticed, entertained and even overwhelmed by the dynamic imagery of television, movies, and an endless stream of other picture-orientated media” (pp. 18–19); which now with the use of the internet and social media, the volume of visual communications has only grown.

This highlights the importance of being able to create visual displays that can stimulate curiosity and interest amongst staff and students around the SDGs, whilst also motivating and encouraging them to make a positive change towards the underlying SDG targets. Horn further highlights that the most effective and important part of visual communication is that it *commands attention*, reaching out to the intended audience, through applications of colour, variation (which the SDGs already embrace), texture and frequent change, so that it does not simply blend into the background to be forgotten. Currently most research into the behavioural effect of visual communication is focused on advertising and political campaigns, as highlighted by Fahmy et al. (2014), and show that images are powerful in attracting viewers’ attention and retention. The power of visual communication in teaching may be underutilised and could be a useful tool to influence student’s behaviour patterns towards sustainability.

This chapter aims to inform engagement activities in a variety of different educational and campaign settings to embed the SDGs using mixed approaches.

It will show the initiatives already carried out across NTU in the curriculum to encourage engagement with the SDGs. Followed by collating some of the leading research on communicating sustainability and how this can be translated into an effective SDG communication campaign, emphasising the importance of message framing in communication activities, the inclusion of students in the development phases and being aware of the potential barriers. The final part will provide case studies on the three visual displays that took place across NTU during the academic year 2017–18, sharing best practices and recommendations.

## 2 Commitment to the SDGs at Nottingham Trent University

Located in the East Midlands of the United Kingdom, Nottingham Trent University (NTU) encompasses approximately 2820 staff and 30,000 students enrolled on around 640 taught programmes. The university has a strong reputation of embedding themes of sustainable development in both curriculum and the everyday activities, supported by its accolades and accreditations. NTU has remained in the top ten of the People and Planet University League, which ranks all universities in the UK since 2009, and it was also the first university in the UK to achieve Gold in the ‘Learning in Future Environment’ (LiFE) accreditation in 2015. It has also been awarded a number of Green Gown Awards, presented by the Environmental Association of Universities and Colleges (EAUC), as well as the Responsible Futures accreditation from the National Union of Students (NUS) in the UK.

Since the launch of the SDGs in 2015, NTU has chosen to adopt the United Nations’ Sustainable Development Goals (SDGs), both as a joint definition of the sustainable development concept and as a framework for all sustainability work undertaken at the university (Erlandsson et al. 2017), with Vice-Chancellor Edward Peck signing the SDG Accord in 2017 (SDG Accord 2017) to further establish NTU’s commitment to the global goals. This commitment can also be seen in the *Curriculum Refresh* (Simmons et al. 2016), a university-wide course review process, where sustainability and the SDGs have received a key role in refreshing the taught curriculum to be in line with the Strategic Plan, *Creating the University of the Future* (Nottingham Trent University 2015). As programmes go through this process, they are encouraged to embed at least one of the SDGs and explore ways of collaborating with other subject areas to contribute towards the realization of the global goals. To further establish the connection between the SDGs and programmes, each module leader has the option to embed the goal(s) most relevant to their module in their online learning room and other module materials (see Image 1). This will create a coherent message around the global goals and give students opportunities to explore their own connections to the SDGs.

In addition, the SDGs play an important role in a wide range of sustainability-related projects across the university. The *Education for Sustainable Development: Future Thinking Learning Room* is an online resource bank containing sustainability-related resources which have been mapped against the SDGs. The learning room also collates a range of community and estate case studies, showcasing the differing projects across the university estates with local community connections related to achieving the SDGs (Willats et al. 2017). The global goals are also the focus of the Sustainability in Practice Certificate, an optional online module exploring sustainability issues that is available for all students and staff at NTU (Molthan-Hill et al. 2015).

The NTU Green Academy Team, first initiated as part of the Higher Education Academy (HEA) Green Academy Change Programme (Puntha et al. 2015), are



Image 1 Example of SDG 13 in online learning room

responsible for providing support to academics to embed sustainable development initiatives throughout the formal and informal curriculum at the university.

### 3 Communicating the SDGs

Expanding on the commitment of NTU to support and embed the global goals through top down curriculum-based initiatives, a more comprehensive approach was needed to ensure the SDGs are fully embedded with the inclusion of students from the bottom up. Regardless of the great progress at NTU to embed the SDGs during Curriculum Refresh, it is ultimately the individual programme leaders who will ensure that their students are gaining knowledge on how to act on the global goals and although some academic staff are excelling in this process others are yet to follow. Therefore, to ensure all our students leave with the knowledge of the global goals, teaching and learning must also be taken out of the classroom. As advocated by the future fit framework for ESD (Sterling 2012), sustainability is flourishing where it has been embedded into the curriculum, including curriculum strategies at extra-curricular events. The aim of this project is to utilise different methods of embedding the SDGs and raise awareness of them at university events throughout the academic year.

During Global Week, a festival that celebrates the multinational community of the four NTU campuses, the Green Academy carried out 127 mixed methods questionnaires with students from a variety of different disciplines across each of the campuses. The aim of this questionnaire was to gauge student's current knowledge of the SDGs, showing that 43% of NTU students know about the global goals. Demonstrating that the Curriculum Refresh process has started to have an impact, with 41% of these students seeing the SDGs directly embedded into their courses. The results also revealed other awareness activities where students have seen the global goals, with 47% saying that they have seen them at NTU events, highlighting the importance of extra-curricular activities. Students had also seen the SDGs on NTU social media, during the NTU's Sustainability in Practice online course and externally to NTU. However, these questionnaires also revealed that there is still a way to go in raising awareness of the SDGs at NTU with 57% of students having never heard about them. The results further highlight the importance of using a mixed methods approach to raise awareness of the SDGs.

It is no surprise that our results show that diverse methods are the best way to teach the global goals, in relation to Education for Sustainability, Sterling (2012, p.37) emphasises that '*learning methods and approaches need to be more open-ended, participative, diverse and interactive than is often the case in academic teaching*'. The development of the visual displays project not only aims to further raise awareness of the SDGs at NTU but also looks at how to encourage, motivate, and facilitate students and staff behaviour to think about how they can contribute to meeting the SDGs underlying targets. Engaging both staff and students to participate in the development phases of the visual displays projects, as co-partners, in creating the sustainable *University of the Future* (Nottingham Trent University 2015), whilst also recognising the importance of making them interactive as possible.

## 4 Supporting Research for Visual Communication of SDGs

During the development of the visual displays project, the engagement activities were based on current research to build a strategy of communication. By raising awareness and working towards the global goals, it is hoped that students and staff will be more engaged and active citizens in contributing to sustainable development. Godemann and Michelsen (2011) posit that it is not enough to raise awareness of the sustainability concept, but people also need to be mobilised through knowledge linked with a direct experience that has meaning and encourages an emotional response, which can also have a practical value; for which the SDGs mostly fit the description and give goals that staff and students can work towards.

## 4.1 *Framing the Message*

The contested definition of sustainability is problematic when trying to embed sustainability across the university, as each discipline conceptualises it differently. Shome and Marx (2009) provides the benefits of message framing through organising an issue around a central context, whilst linking this to immediate action with the use of ‘shortcuts’ and symbols, as the SDGs have done for sustainability. The SDGs framework is the perfect opportunity to bring a common understanding of sustainability across the disciplines at the university illustrated previously by Molthan-Hill et al. (2015).

This central framework for sustainability is helpful to encourage positive behaviour change across the institution. Not only can they explore sustainability in many different dimensions by focusing on a few of the 17 individual goals or underlying 169 targets, they can be used to encourage individual action and promoting self-efficacy. The challenge is to translate these targets into action, framing a message that is not just facts and data but to also tell a story that ignites our imagination for what can be done. It should be noted that with the 17 goals and 169 underlying targets, the SDGs are complex in what they are trying to achieve, but also complex to understand when first seeing them. Therefore communicating a few of them at a single time so that they are not overwhelming, and in a way that draws attention is a central feature of the visual displays project.

Transforming the global goals into action depends on how individuals respond to information given to them during the visual displays. Graham and Abrahamse (2017) state the importance of peoples pre-existing values, and tapping into these to enhance the effectiveness of communication campaigns. Their study on people’s attitudes and values towards eating meat, framed messaging around two values sets, the extrinsic self-enhancing value set which looks at how the individual will benefit, compared to the intrinsic self-transcendence value set that may be influenced by more collective framed messaging. Therefore, framing messaging to your intended audience is vitally important and tailoring these messages to suit their particular value set will be the best approach to influence students and staff attitudes and behaviour. Our main target audience, the students, are at a point in their lives where they have chosen to come to university to enhance career progression and enjoy themselves, therefore individually framed messaging may be more appropriate. However, Shome and Marx (2009) state the importance of framing from multiple perspectives therefore messages that show our collective impacts were also used during the display. Insights from psychological science (van der Linden et al. 2015) advocate that people evaluate losses and gains differently, and by focusing on positive ‘gains’ from actions that individual staff and students can take this will increase the support of working towards the SDGs during the visual displays.

## 4.2 *Engaging Students in Developing SDG Visual Displays*

The inclusion of students working with the Green Academy to produce an effective strategy of communication via visual displays, is an important part of education for sustainable development (ESD) projects.

The goal of an education for sustainable development (ESD) is to help create the conditions for self-determined and autonomous action and not just to train changes in behaviour. ESD aims at developing and enhancing the creative potential in the individuals, his competencies in communication and cooperative work as well as problem-solving and taking action. Godemann and Michelsen (2011, p. 10)

In order to nurture the creative potential of students, workshops were developed for two of the three final visual displays as shown in the case studies, including problem solving activities and encouragement on how to call for action on the SDG targets. By including students this way, it can subsequently transpire to unexpected rewards as shown in the final cast study. Horn (1973) also highlights the importance of involving students in the design and construction of projects so that it can help draw attention to the issues the SDGs are trying to solve, and more importantly they can signal to others how they should act to work towards them.

van der Linden et al. (2015) developed five ‘best practices’ to improve public policy making on climate change:

(a) emphasize climate change as a present, local, and personal risk; (b) facilitate more affective and experiential engagement; (c) leverage relevant social group norms; (d) frame policy solutions in terms of what can be gained from immediate action; and (e) appeal to intrinsically valued long-term environmental goals and outcomes. (van der Linden et al. 2015, p. 758)

Adapting the five ‘best practices’ in the context of communicating the SDGs, the Green Academy developed workshops both followed a similar structure to help students address behaviour in sustainability. First, the workshops emphasised an issue of a particular goal that the visual displays need addressing, during the workshops the Green Academy used experiential engagement activities where the students evaluated behaviour change models, discussing how to lever social group norms, and submitting ideas that showed the benefits of immediate action appealing to the long-term goals of the SDGs. This allowed the students to reflect critically on not just their own actions, but everyone’s actions collectively, whilst also allowing them to influence sustainability change within the university in a positive way (Godemann and Michelsen 2011) through the creation of a visual display.

## 4.3 *Barriers to Communicating the SDGs*

Problems that relate to the economy, environment, social welfare and health (Newman-Storen 2014) such as loss of biodiversity loss (Sharman and Mlambo 2012), and climate change (Head 2008; Sun and Yang 2016) are increasingly being

referred to as ‘wicked problems’. This is attributed, to their complex nature with complex solutions that are not immediately available, nor solvable (Rittel and Webber 1973). The SDGs provide the opportunity to collate these ‘wicked problems’ and outline the specific goals to end them. However, due to the complexity of the issues covered there is a danger to overwhelm and in fact disengage people. According to Shome and Marx (2009) people have a limited capacity to worry, thus only using a few of the global goals during the visual displays is significant.

Using visual aids prompts engagement from students and staff with the SDGs in a positive manner for them to work towards the targets, without exasperating public disengagement with sustainability issues. Chapman et al. (2016) discusses how visual mediums may be a potentially powerful way to connect people with issues of climate change [and sustainability issues] by contextualising less familiar concepts through images. Creative visualisation has been argued to be helpful with communicating sustainability issues (Adomßent and Godemann 2011; Manzo 2010), however, using frightening, sense of fatalism images should be avoided, as they may draw attention to the issue, but they are likely to disengage the public further and disempower them. This view is also supported by O’Neill and Nicolson-Cole (2009) who recommend that using personal changes that the individual can make will likely increase self-efficacy. Communication for social change must consist of efforts to increase student and staff motivation and help lower the barriers (Moser and Dilling 2007) to the realisation of the SDG targets.

Djordjevic and Cotton (2011) summarise some of the communication barriers that the visual displays have sought to overcome. Complex messaging that is not contextualised for the intended audience can be prevented through including students during the development phases. The problem of shared understanding about sustainability is overcome using the SDGs framework. Ensuring that the message sender does not lack authority, as Nisbet and Kotcher (2009) highlight, these ‘opinion leaders’ are important to accelerating behaviour change, the person communicating the message not only needs to have knowledge of the issues to tailor the information for individuals they also need to have charisma. Working in collaboration with other teams such as NTUs Global Team and Sustainable Development team (estates focused) help combine efforts to prevent too much noise in the channel which causes confusion and feelings of being overwhelmed with messaging. Finally, the last barrier mentioned is focusing too much on electronic communication rather than in person, highlighting the importance of being at different events across the institution.

The supporting research and behaviour change models used for the SDG visual displays are not intended to be exhaustive. As Ballantyne’s (2016) research highlights climate change communication is suffering from ‘conceptual confusion’ where communication is far more complicated than the theories advocate. For the intended purpose of creating awareness campaigns of the SDGs through the visual displays project, mixed approaches are applied to frame messaging with students and staff values in mind and develop best practices. Each visual display will provoke a recognition of large-scale problems, contextualising the less familiar (Chapman et al. 2016) and highlight the tangible benefits to try and leverage social group norms (van der Linden et al. 2015).



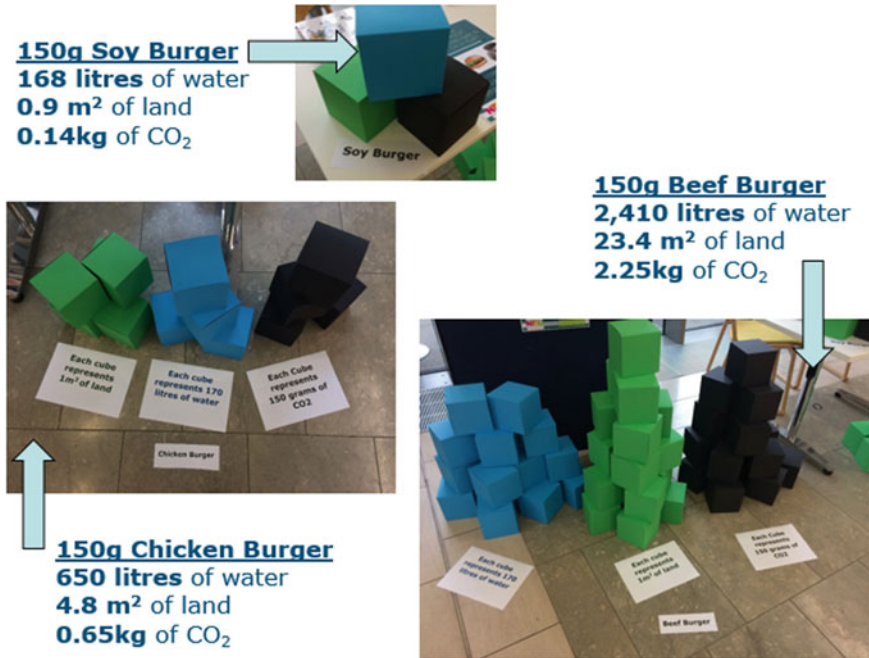
## 5 Case Studies of Visually Displaying the SDGs

This chapter will showcase case studies describing visual displays that took place over the academic year 2017–2018 during three separate themed weeks at NTU—Green Week, Global Week, and Fashion Revolution Week. Compared to other methodologies commonly used, the case study methodology is often said to be unable to provide general conclusions and repeatable outcomes. Instead, this method allows to get an insight into real-life, practical examples (Yin 2009) and get an understanding of the outcomes of contemporary projects. Hence, the aim of this chapter is to provide tested models of good practice to inspire others to develop their own practical ideas that can be implemented in other educational settings.

### *5.1 Case Study 1: Food Impacts and Working Towards SDG 12 Responsible Consumption and Production and SDG 13 Climate Action*

Each year NTUs Sustainable Development Team and Green Academy Team run a series of events aiming to raise sustainability awareness across the entire university during Green Week. This year's chosen theme was food waste, directly relating to SDG 12 target 3: 'By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses' (United Nations Sustainable Development 2018). During Green Week, the two teams collaborate to make as much noise as possible through activities including: the food impacts SDG visual display visiting all NTU campuses, a food waste photography competition open to everyone, all NTU Dine outlets offered a low carbon menu, a 'Love Food Hate Waste' workshop ran for students at Brackenhurst campus after food waste caddies had been introduced to halls, a session in the allotment at Clifton Campus to learn how to compost food waste, a food themed 'Sustainability in Practice Challenge' day (Dharmasamita et al. 2016), several film screenings of the BBC Simon Amstell mockumentary 'Carnage' with a discussion on the impact of our diets, and three contributions to our online NTU SDG blog by an associate lecturer in the Green Academy writing about the expectations, half way point, and outcomes of COP23 which was also taking place during this week.

The first SDG visual display was kept relatively small, to discover what works and develop best practices within the Green Academy. Individually framed messaging was the central theme chosen for this display due to the Graham and Abrahamse (2017) research on the values and attitudes of individuals towards meat, showing that both value sets, self-transcendence and self-enhancement, both responded better. However, to ensure there was a diversity in the messaging to reach as many staff and students possible, the collective impacts were also shown as part of a competition where students and staff guessed the amount of beef burgers thrown away each year in the UK.



**Image 2** Food impacts visual display on SDG 12 and SDG 13

The focus of the visual display was to encourage students and staff to make sustainable food choices by raising awareness of the impact of three different types of burgers: beef, chicken, and soy, showing the water and land resource impacts of each individual burger, along with the associated carbon emissions (Image 2), which Graham and Abrahamse (2017) advocate is necessary to move to a low carbon society.

This display also linked with three of the SDG targets: 12.2 ‘Achieve the sustainable management and efficient use of natural resources’, 12.8 ‘Ensure that people everywhere have the relevant information for sustainable development and lifestyles in harmony with nature’, and 13.3 ‘Improve education, awareness-raising, and capacity on climate change management’ (United Nations Sustainable Development 2018) which were shown on large posters on display boards. The boxes for the display were sourced from a sustainable supplier and are made from recycled paper.

By looking at the impact of different types of burgers, the display aimed to show an unfamiliar problem and contextualise it into something visible, to encourage individuals to eat less beef to reduce environmental impacts, but also to demonstrate the absurdity of the amount of beef that collectively gets wasted each year in the UK equivalent to 300,000 beef burgers (Smithers 2016). The display drew attention, with most common response being disbelief at the resource cost of a single beef burger.

## **5.2 Case Study 2: Ocean Plastic and Working Towards SDG 14 Life Below Water**

Building on the learning of the Green Week visual display, students were involved in every part of the process for the next visual display, including developing the concepts for the ocean plastic visual display as well as creating it. To get students involved the Green Academy advertised two ocean plastic visual display workshops via NTU event pages, NTU social media, and through the support of academics sharing the advert with their students. Incentives were used to encourage student engagement with a competition for the best idea for the visual display, including a £150 budget for the winning project and a £50 reward voucher once the project was complete.

The two workshops were fully subscribed with ten students in each, they took place over two consecutive days, at different times, to support student attendance. The purpose of the workshops was to give students a clear background and understanding to develop a visual display idea, that then students can submit three days after the workshops. A short 10-min presentation introduced students to the outline of the workshop, the SDGs, and the issue of ocean plastic. The first activity was an icebreaker where students were put into three groups and were asked to share with each other their names, what course they were on and why they came to the workshop along with choosing a silly team name, helping them relax and realise why they were taking part. To come up with solutions, students were first asked to understand the problem in more detail and were shown the ISM Model (see Fig. 1).

Using the ISM model allowed students to see behaviour change outside of the individual context and understand the problem in detail. Not only could they see the individual factors that affect people's choices and behaviours, it also showed them the factors that exist beyond them in the social realm and the material factors which shape people's behaviours. Once introduced to this model, students worked in their groups to evaluate the problems surrounding ocean plastic which were then shared and discussed with everyone via a fishbone diagram (see Image 3).

After exploring the problem, the students then reflected on which behaviours they could focus on for the display. The final activity was showing students successful campaigns and followed on by a discussion of which ones they liked and why. To end the session students were then given a project idea development sheet with the criteria for which they would be scored, firstly they had to include SDG 14 target 1 'By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution' (United Nations Sustainable Development 2018), raise awareness of plastic pollution, and think about the logistics of how easily it can be moved around the campuses and be safe.

All students that attended the workshop handed a completed project proposal form, which NTU's Green Academy scored. Two projects ideas stood out from the rest, the first was the SDG 14 logo made from 446 bottle tops (see Image 4) to show approximately how many plastic bottles that are thrown away every second in the

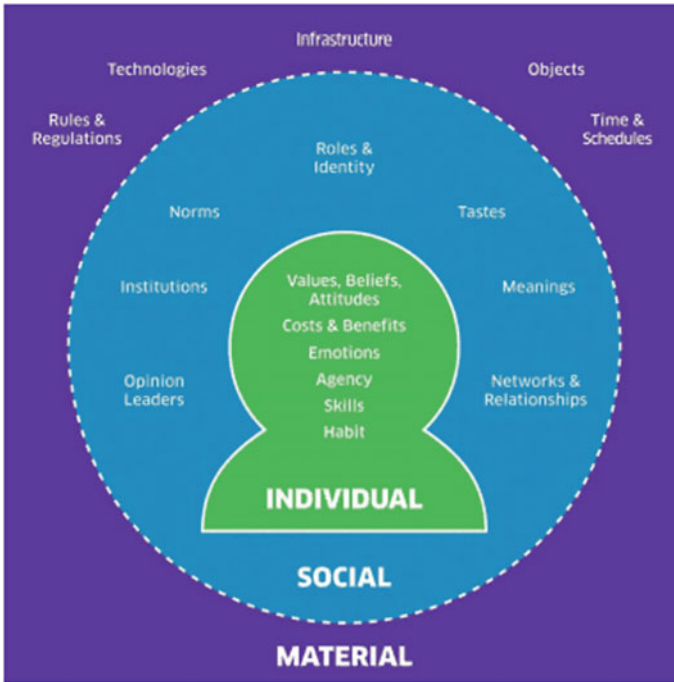


Fig. 1 ISM model, The Scottish Government, 2017

UK, developed by a student in the Animal, Rural, and Environmental Science School at NTU.

The second idea was created by an NTU Art and Design student, Eleanor Sexton, whose idea was fun, playful, and commanded attention. Not only did she spend time creating the display, she also built social media presence and included this project in her final dissertation portfolio. Using the arts to convey our message as useful in making sustainability information more interesting to the students and staff at NTU and present it in a way that is easy to remember (Curtis 2011).

The Sustainable Hippy visual display (Image 5) aimed to incorporate SDG 14 Life below Water, whilst still being visually and mentally stimulating to the millennial demographic. As part of the primary research for her final year report focusing on packaging, the findings suggested that recyclability is often dull using grey visualisation. The Sustainable Hippy was created to push the boundaries of this perception, having an awareness of cultural and societal macro and micro trends. This concept primarily dominates on the realisation of natural disaster, through WGSN’s Psychotropic theme (2018), which explores an idealised futuristic vision of nature. To connect to a range of demographics (primarily Millennials and Generation Z), the display aimed to inform and educate in a fun and light-hearted way, yet communicate

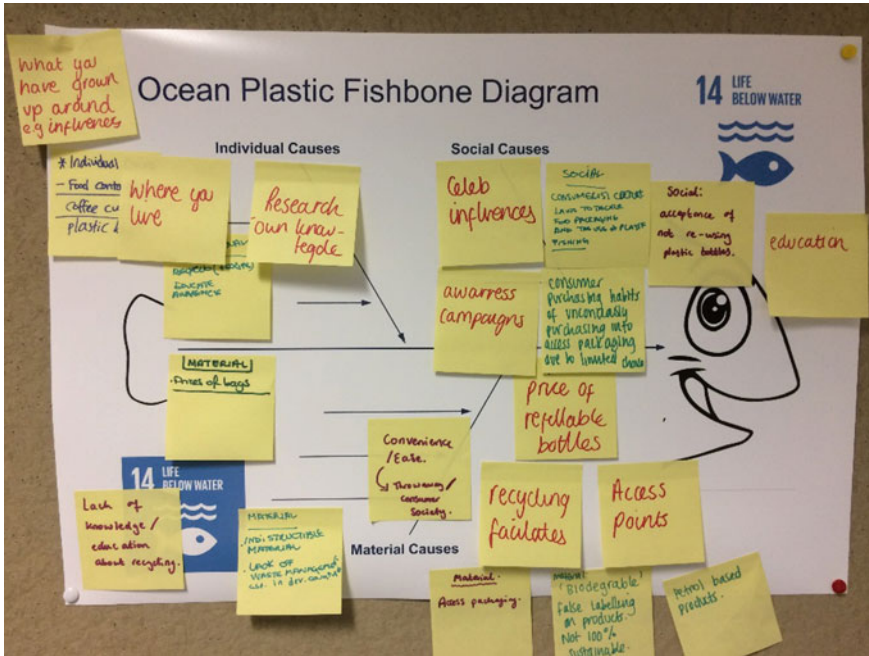


Image 3 Ocean plastic workshop ISM fishbone diagram activity

Image 4 SDG 14 life below water plastic bottle top visual display





**Image 5** The sustainable hippy visual display

the issues around ocean plastics and hold a high-level of importance and meaning, whilst showing what the present and future holds without action.

The Sustainable Hippy is made from recycled material from a local scrap store in Nottingham, clashing multi-mediums to represent how marine life is interrupted by our behaviour. This is visually represented within the concept through the plastic-filled stomach and the character's light-hearted yet unhappy tone-of-voice. Research from Hamid et al. (2017) points out the importance of utilising social media as the most effective way to communicate sustainability issues. The Sustainable Hippy was promoted through the social media platform, Instagram (@thesustainablehippy), which taps into the ISM model used during the workshop hoping to encourage behaviour change through social influences.

To create a successful concept, the students chosen communication strategy was to link the display to the past, proposing the audience are more likely to feel an emotional response when exposed to vivid imagery that connects to personal experience using both processed systems of the human brain (Shome and Marx 2009). For this visual display, the goal was to channel the 1960/70s hippy movement, an aesthetic that is humorous and adds an authentic personal touch, which has proven during Global Week to be a great tool to capture the audience. Therefore, The Sustainable Hippy portrays a fun-loving, slightly unusual but real personality that is diverse in identity and attracts the public through happy energy steering clear from framing the message

with fear. This ultimately invites the interest of the audience, who want to know the story, and purpose behind the visual display.

Both displays were shown during Global Week's activities on each of the NTU campuses. Using an art display positively assisted public engagement during the week where 183 students pledged to reduce their own plastic usage and stop using disposable plastic bottles. Along with 127 students filling in a questionnaire looking at their engagement with the SDGs during their time at NTU and leaving feedback on which part of the display they thought to be the most impactful. The SDG 14 logo display and The Sustainable Hippy both took precedence over the information posters, fact sheets and social media. The Sustainable Hippy gained 87 followers and now regularly posts about to reduce our own plastic footprint.

### ***5.3 Case Study 3: Fast Fashion and Working Towards SDG 12 Responsible Consumption and Production and SDG 10 Reduced Inequalities***

The final display of the academic year took place during the international campaign Fashion Revolution Week (2018). By running alongside and supporting the larger campaign the Green Academy were able to make use of their materials and save time. Students again developed the visual display first through an interactive workshop looking at a behaviour change model, followed by students submitting their ideas. The promotion of the workshop followed the same method as the Ocean Plastic Workshop promotion including the £150 budget for the successful project, however, this time the £50 reward voucher was removed to see if students still showed an interest without a financial incentive which seemed to work. The workshop ran once with 15 students due to their availability, with the majority opting for one particular date.

The purpose of the workshop was to introduce the students, if they were not already familiar, with the Fashion Revolution Campaign and the SDGs. The first activity was the same as the previous workshop including a short introduction to why they had come. In order to help students develop their concepts for the display they were introduced to the Unilever Five Levers of Change Behaviour Change Model (2017). During this activity students were encouraged to look at the individual impact of Fast Fashion including both the social & economic wellbeing and environmental impacts whilst applying and evaluating Unilever's Five Levers of Change (2017) model.

After going through the five levers in their group's students then used sticky notes to put their ideas on a larger collective poster of the model, followed by a group discussion (see Image 6).

After looking at the levers, students discussed how fashion sustainability could be more easily understood through lectures and events, the difficulty of trusting brands and how hard ethical information is to find. They then evaluated the activities that could reduce this impact such as upcycling, recycling, and swapping clothing events.

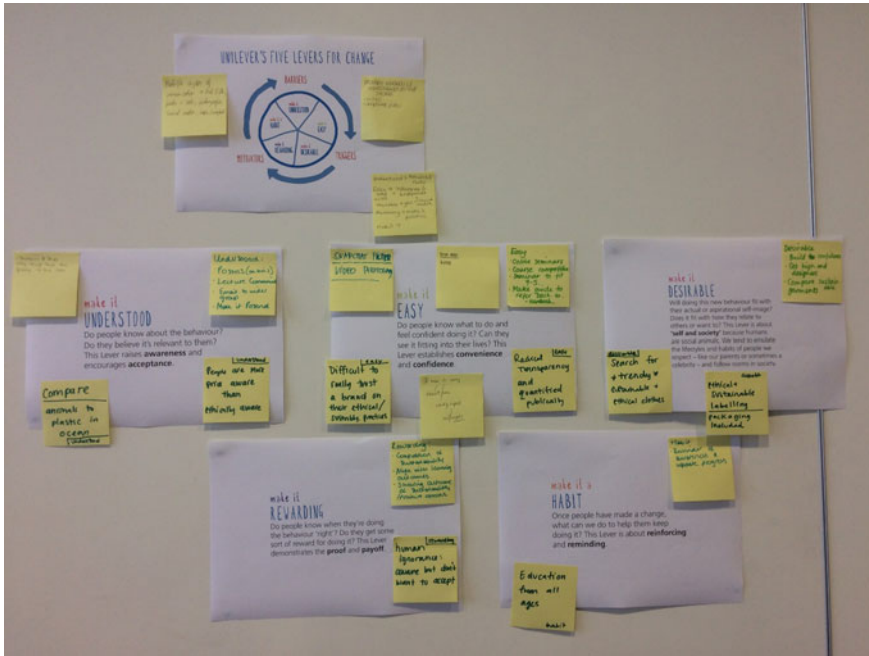


Image 6 Fashion revolution workshop Unilever’s five levers activity

Students during this workshop were really engaged and set up a working group via social media so that they could continue to communicate about Fashion Revolution Week. One surprising outcome of the workshop was that the fashion students who had taken part had started a petition to embed the sustainability in practice certificate into their programme of study, gathering 37 student signatures. The fashion programme leader is now in contact with the Green Academy looking at embedding this for the next academic year.

The final visual display idea was developed by a student in the Nottingham Business School, their idea was to raise awareness of the SDGs using labels to show which targets relate to the fashion industry and how they are combating different global issues (see Image 7). For example, showing the estimated number of children working in garment production, and then connecting it to the solution SDG 8 target 7 ‘Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms’ (United Nations Sustainable Development 2018). The SDG targets used in the visual display 1.1, 1.2, 5.1, 6.3, 6.6, 10.4 and 12.5 the display also raised awareness of what direct actions people could take such as choosing sustainable fashion labels, for example EU Ecolabel, Fairtrade, Better Cotton





**Image 7** Fashion revolution week SDG visual display

initiative, Fair Wear Foundations. The parts for the visual display, the clothing and mannequins were borrowed from the Art School.

During the week students took photographs of themselves with the ‘who made my clothes’ sign which was then used on our Instagram, @sustainabilitydiaries to tag the brands they were wearing as part of the larger international campaign to ask for transparency in supply chains across the fashion industry. The workshop students also ran a clothing swap event alongside the visual display stall.

## 6 Conclusions and Recommendations

Taking ESD out of the classroom is a dynamic, interactive, and delightful way to teach sustainability using the SDG framework during extra-curricular events. Supporting research has highlighted that engagement should not just focus on the giving of knowledge but should include a personal, emotional connection, whilst contextualising unfamiliar problems in a way that is easy to understand. Visual displays are useful in this context to promote efficacy, empowering individuals to be part of the solution and change their behaviour to contribute to the realisation of the SDG targets.

Message framing is difficult given the complexities across communication theory. However, drawing on the theories has allowed for some best practices for creating visual display to be developed to raise awareness of the SDGs. The most important learning from our displays is the inclusion of students, using their creative potential for the development of the displays allowed insight to the targeted audience, making the behaviour change campaign more effective. Collaboration with other teams is another significant learning as this allows the campaign to get more of an outreach by jumping off already established groups and events to gain maximum impact, such teams at NTU included: Sustainable Development Team, Global Team, and the Green Art Students Group. Face to face contact has been highlighted as crucial for communication campaigns, having an enthusiastic opinion leader to develop and exhibit displays can help make the campaign impactful.

The content of the visual display has been most impactful when the message was short, clear and consistent, whilst avoiding overwhelming the audience with too much information and not using fear framing. Another observation is that using campaign ideas based around what is topical in media such as Ocean Plastic helps engagement along with using artistic messaging. It is hoped that the best practice developed during the three visual displays will inform engagement activities in other educational settings using mixed approaches to embed the SDGs.

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