



ENTERPRISE PROJECTS

TECH FOR GOOD >

Session plan



Prince's Trust

**START
SOMETHING**

AT A GLANCE

This is the first session in the Digital Creativity unit. Learners will be introduced to the concept of 'Tech for Good' in the context of sustainability and the United Nations' Sustainable Development Goals (SDGs). They will start to consider how the application of digital skills and technological solutions may start to address some of these challenges. This session was made with the support of Apple and was created by Coventry University.



LLN OPPORTUNITIES

- ✓ Learning and applying new technological terms
- ✓ Reading about and discussing SDGs and technologies



MATERIALS

- ✓ Tech for Good presentation
- ✓ Your SDGs worksheet
- ✓ Downloadable copy of the UN's SDGs - <https://www.globalgoals.org/>
- ✓ Computer with internet access to play videos
- ✓ Emerging technologies information sheet
- ✓ Ideation worksheet
- ✓ Optional worksheets

LEARNING OUTCOMES

- ✓ Explore and understand the Sustainable Development Goals
- ✓ Understand Tech for Good in the context of the broader digital landscape

ACTIVITIES

ACTIVITY	TIME	PAGE
<u>What are the SDGs?</u>	25-30 minutes	<u>03</u>
<u>The digital landscape</u>	15-20 minutes	<u>05</u>
<u>How can Tech for Good address the SDGs?</u>	15-20 minutes	<u>07</u>
<u>What is your goal?</u>	25-30 minutes	<u>08</u>
<u>Wrap up</u>	5-10 minutes	<u>09</u>

WHO CREATED THIS SESSION?

Dr Bianca Wright is Associate Professor and Curriculum Lead: Immersive in Coventry University's Faculty of Arts and Humanities. Bianca has worked on a range of projects in academia and industry, most recently focusing on immersive technologies and digital skills development. Coventry University's Faculty of Arts and Humanities aims to experiment in, and share digital and immersive cultural practice across, teaching and learning, community and industry engagement and research, through an ambitious programme of digital projects in augmented reality, virtual reality and digital praxis.



WHAT ARE THE SUSTAINABLE DEVELOPMENT GOALS? >

This unit uses Challenge-Based Learning to engage young people in digital creativity. Challenge-Based Learning is an approach built around developing skills while solving real-world problems. It asks learners to engage with the real challenges facing the world and in doing so, to develop their knowledge, understanding and skills. To find out more and to access a toolkit of resources around Challenge-Based Learning, visit <https://www.challengebasedlearning.org/>



TIME REQUIRED

25-30 minutes



MATERIALS

- ✓ Tech for Good presentation
- ✓ Your SDGs worksheet
- ✓ What are the sustainable development goals? video - https://www.youtube.com/watch?v=M-iJM02m_Hg
- ✓ Downloadable copy of the UN's SDGs - <https://www.globalgoals.org/>

ACTIVITY STEPS >

1. The focus for this activity is on understanding sustainability and, more specifically, the sustainable development goals. Explain to learners that this session is about developing their digital creativity by using technology to make the world a better place and that the specific focus will be on sustainability.
2. Using the Tech for Good presentation, introduce the new topic by explaining that you will be exploring the concept of 'Tech for Good' and how technology can be used to address the UN's SDGs. Explain that the UN is an international organisation made up of almost every country on Earth. It aims to create better lives for people, protect the environment and ensure peace, and it has set out its own goals to achieve these things.
3. When you reach the related slide on the presentation, ask the learners to consider what they think is needed to create better lives for all people, ensure peace and protect the environment. Discuss their concerns and any issues they are aware of in their local communities.
4. Hand out the 'Your SDGs worksheet' and encourage learners to come up with their own SDGs for the future they want to build. There is also an example of a SDG on the worksheet to guide the learners.

For example, they may be concerned about finding work in the future and decide to set a goal related to this, such as "increase job opportunities for all people".



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Remind the learners that there are no right or wrong answers. This is about what they think would make a more sustainable world based on their understanding of sustainability.

5. Play the 'What are the sustainable development goals? video' which explains the UN's approach to sustainable development.
6. Hand out the downloadable copy of the SDGs. Discuss with the learners how their SDGs differ from the UN's:
 - Are there any areas they think the SDGs do not cover?
 - What did they not consider in their own SDGs?
 - Were there common themes among the learners?
 - What do they think needs to happen for their SDGs to be achieved?

FIND OUT MORE

If you or your learners want to find out more about this topic, here are some useful resources:

- ✓ 17 Goals for People, for Planet: <https://www.un.org/sustainabledevelopment/development-agenda/>
- ✓ The world's to do list: <https://www.youtube.com/watch?v=XztZOIQcccl>



THE DIGITAL LANDSCAPE >



TIME REQUIRED

15-20 minutes



MATERIALS

- ✓ Emerging technologies information sheet
- ✓ Tech for Good presentation
- ✓ Emerging technologies worksheet (optional)
- ✓ Industry 4.0 timeline (optional)

ACTIVITY STEPS >

1. Explain to the learners that technology is often looked at as a source of possible solutions to address sustainability. While technology cannot solve every problem, it can be used to tackle global challenges in specific ways.

Can the young people think of any examples? Below is an example you could share with the group. There are also more examples in the 'Emerging technologies information sheet'.

Drones with cameras attached to them have been used to monitor nature reserves and prevent the poaching of elephants and rhinos.

The drones are flown over the large areas of the nature reserves and they look for heat signatures from both humans and animals.

These images are then used to identify possible poachers who are wanting to kill or hurt the animals for their horns or tusks. Rangers are then sent to those areas to stop the poachers.

2. You will now introduce the term 'digital landscape' to your learners. Explain that digital technologies and the impact they have on how we live, work and play are collectively called the 'digital landscape'. Technologies could include mobile phones, drones, robots, smart televisions, computers, smart devices that use sensors to monitor things and much more.

Using the digital landscape section in the 'Tech for Good presentation', explain that digital technologies are changing the ways we live, work and play.



3. Ask the learners if they can think of any examples of digital technologies that have changed the way we live, work or play. You could start the discussion by talking about Netflix as an example.

NETFLIX

Netflix changed the way we watch TV shows. Before digital platforms like Netflix, TV series were aired weekly or daily, and you had to wait to watch the next episode. You had to be in front of a TV at a specific time. If you missed an episode, there was no option to watch on demand.

You also had limited choice of what you could watch. TV channels decided a specific order for programmes, and you had to watch them in that way. Streaming services like Netflix offer you a range of choices of shows and films you can watch when and where you want to, provided you have access to a device like a mobile phone, smart TV or computer.

Netflix changed where we watch TV too. The TV was usually the device needed to watch TV shows and it was usually in the living room. Now we can watch Netflix on our phones or computers. It means that TV can be mobile and we can watch it on the train or bus, in a doctor's waiting room or even outside in a playground, as long as we have access to the internet.

OPTIONAL EXTENSIONS

INDUSTRY 4.0

You could introduce your learners to the idea of 'Industry 4.0'. There are 2 slides in the Tech for Good presentation that explain what this is and a timeline you can hand out to the learners. Explaining this concept will give learners some more context of how technology has developed over the centuries and what the future of technology looks like.

This infographic may also be useful: <https://stfc.ukri.org/files/digital-revolution-infographic/>

EMERGING TECHNOLOGIES

Hand out the Emerging technologies worksheet. The worksheet lists technologies like augmented reality, artificial intelligence and the Internet of Things. The learners should develop their own definitions of the technologies listed. You can then encourage learners to take another look at the Emerging technologies information sheet (used earlier in this activity) to compare their understanding to the definitions and examples provided. Learners can also find out more by visiting the links listed on the bottom of their worksheet.



HOW CAN TECH FOR GOOD ADDRESS THE SDGs? >



TIME REQUIRED

15-20 minutes



MATERIALS

- ✓ Tech for Good presentation
- ✓ Tech for Good video: <https://www.youtube.com/watch?v=HTYeb6g4ivY>
- ✓ Tech for Good quiz: paper or digital version (<https://create.kahoot.it/share/prince-s-trust-digital-creativity-tech-for-good-quiz/6e8d0a8c-cb78-4560-899f-5ef34c40cd7a>)
- ✓ Tech for Good case studies (optional)

ACTIVITY STEPS >

1. Ask the learners to look at the SDGs again and, in pairs, come up with as many examples of technologies that are or could be used to address one of the goals. For example, if the learners want to address the SDG around ending hunger, could an app be used to connect people in need of food with restaurants that had leftover food to give away?
2. Play the 'Tech for Good' video. You should stop at about the 7-minute mark. If you have extra time or your learners are interested, you could play the entire video.
3. Using the Tech for Good section of the presentation, show the learners some examples of Tech for Good projects that have addressed social issues.
4. Hand out the quiz or if using the digital version, ask learners to respond online. Once they have completed the quiz, go through the answers below:

QUIZ ANSWERS

1. b - a way of storing and sharing information
2. a - true
3. d - an on-demand subscription model
4. a - electrical power
5. b - false
6. fourth (accept Industry 4.0)
7. d - people using technologies, skill and knowledge collaboratively for good
8. d - all of the above

5. Wrap up the activity with a recap of the topics: SDGs, the digital landscape and Tech for Good. Ensure that learners have a sound understanding of each before moving on.

OPTIONAL EXTENSION

Hand out the Tech for Good case studies sheet. Ask learners to write down what SDGs each case study addresses and discuss their ideas.



WHAT IS YOUR GOAL? >



TIME REQUIRED

25-30 minutes



MATERIALS

- ✓ Ideation worksheet
- ✓ Downloadable copy of the UN's SDGs - <https://www.globalgoals.org/>

ACTIVITY STEPS >

1. Divide the larger group into smaller groups of 3 to 5. Ask the learners to decide who will be the leader of the group. They will assign other tasks to group members later in the process.
2. Hand out the 'Ideation worksheet'. Encourage the groups to discuss the SDG(s) that they are most interested in and why they are interested in it.
3. Next, ask the groups to decide on a particular SDG that they want to tackle using specific technologies that they think would help them work towards that goal.

For example, learners may be interested in using Tech for Good to address the SDG around climate change. The SDG states: "Take urgent action to combat climate change and its impacts". Their idea might be to create awareness and motivate people to change their behaviours through the use of a mobile app that allows people to earn points when they learn something about climate change or do something that positively impacts on the climate, such as recycling or not using plastic straws. The points can then be used to buy things on an app store.

Learners may decide to tackle an aspect of the SDG rather than the entire goal. The example above tackles individual behaviour rather than looking at how industries or governments might address climate change, for example.

4. Before finishing this activity, make sure the learners have recorded their ideas and connected with their group, as they will be working on this project over the next few sessions.



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WRAP UP >



TIME REQUIRED

5-10 minutes

ACTIVITY STEPS >

1. Discuss with the learners what they learned about the relationship between Tech for Good and sustainability. What were they most surprised to learn? What did they already know about the topics covered?
2. For preparation for the next session, ask the learners to do additional research on their chosen SDG and identify any existing tech resources related to the SDG.

