Joining the Doughnut Dots



ACTIVITY | TEACHING TOOL

An activity for getting to know the dimensions of the Doughnut and their interconnections

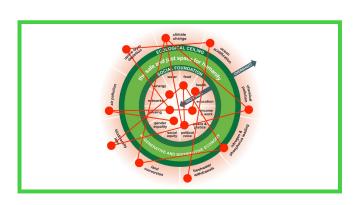
By the DEAL team and Manda Brookman. See acknowledgements for all contributions.

Overview

This activity offers a fun way to get to know the dimensions of the Doughnut and their interconnections. Participants are invited to take a card representing one of the dimensions then mingle with the rest of the group, meeting in pairs to introduce themselves and their dimension and discuss possible interconnections.



- The activity generates a lot of energy and it's a great way for people who don't know each other to meet
- Participants get to see their dimension of the Doughnut in different ways through each encounter
- Through the many encounters, many possibilities for connections between dimensions arise





Communities | Educators | any groups looking to get to know the dimensions of the Global Doughnut



45 minutes



21+ (can do with fewer)



Print-outs of each of the 12 social foundations and 9 planetary boundaries



Bringing attention back to the whole group and facilitating discussion

Timetable



Welcome and Introductions

Total		45 min
Part 3	Reflections and Close	15 min
Part 2	Joining the Doughnut dots	25 min
Part 1	Pick a Card	5 min

Preparation

Prepare the print-outs to represent all the dimensions of the Doughnut - the 12 social foundations and 9 planetary boundaries - for as many participants there will be. You can download these here.

Welcome and Introductions

If you are an educator using this guide as a lesson, start by welcoming everyone, then give an overview of the lesson and how it fits in the context of the class' learning journey.

If you are a facilitator using this guide as a workshop, start by welcoming everyone, introducing yourself and giving an overview of the activity. Then, depending on how much people already know each other, invite the participants to introduce themselves in whichever way you feel is appropriate. There are many wonderful ways to do this that help people feel safe, included and welcome. See seedsforchange.org/resources for examples.

Part 1: Pick a card



5

- Invite participants to take a card representing one of the dimensions of the Doughnut (either choosing one that interests them, or picking one randomly)
- Then invite participants to familiarise themselves with their dimension. You may wish to ask the following questions:
 - How familiar are you with this dimension of the Doughnut?
 - How does it show up in your life?
 - Think about how it might vary across the world?

Part 2: Joining the Doughnut dots



25

- Once everyone has a card, and is familiar with its contents, invite participants to meet and mingle. You may wish to use the following script:
 - Once you have your card, move around the room and meet someone else
 - As a pair/in your pairings, take it in turns to share your dimension of the Doughnut with the other person. Aim for about one minute each
 - Then take a further couple of minutes to reflect on the many possible connections between both of your dimensions, also thinking about the directionality of the connection. What causes what impact in the other, and vice versa
 - Once you've done this, raise your hand high in the air and look for someone else with their hand up and go and meet them
- 2 Allow at least 20 minutes for the mingling. This should allow people to meet at least 5 others

NOTE:

The amount of time you allow for this is a balance between activity fatigue and how many connections people get to make. Try and sense the energy in the room. If people still have lots of energy after 20 minutes, consider allowing more time.

Part 3: Reflections and close



15

Invite participants to finish the pairing they are currently in then come back to a whole group.

Once it has quietened, invite any reflections or connections anyone may wish to share.

Some of the reflections shared back by participants may include:

Many of the connections between the dimensions can vary, depending upon the methods we choose for doing things, and factors including culture, technology, scale, governance, politics and finance. So the relationships can vary, and they can change.

There are lots of feedback loops / knock-on effects. As people meet their needs they can have very big impacts on planetary boundaries and as the planetary are impacted, so in turn these effects rebound with many social and ecological consequences.

Some of the social dimensions are very intensely connected to everything else. How food is produced and distributed, for example, has repercussions for every planetary boundary (see below). Energy, water and housing likewise have intensive effects.

Not all of the dimensions have immediate, obvious connections – but then eventually you see how in some contexts they could be quite closely related. (Gender equality and ozone-layer depletion, for example, may not seem instantly connected – but refrigeration transforms household work, and healthcare, and so has strong gender implications).

It's tempting to try drawing on all the lines that join the Doughnut's dimensions - the only problem is that the Doughnut would end up looking more like a bowl of spaghetti.

Finally, thank everyone for participating and draw out any highlights from the activity or how the activity fits into the wider scheme of what has happened before or what will happen next.

Where to take it next

If you're doing this activity as a lesson, next try **Take a Stand**, an activity to explore the diversity of views about whether humanity can get into the Doughnut by 2050.

How everything is connected: the example of food

Food can be produced and distributed in many different ways, with potential implications for every one of the planetary boundaries. Some illustrations include:

Food and Climate Change

Industrial food systems are very carbon intensive. Land clearance and deforestation significantly reduce carbon sequestration; in addition, tilling the soil releases carbon dioxide. Cattle farming generates methane. Tractors, processors and food transporters are all intensive users of fossil fuels.

Food and Ocean Acidification

Carbon dioxide in the atmosphere dissolves in the ocean and reacts to make it more acidic. This weakens ocean-based food systems as well as the livelihoods of those based on those systems.

Food and Chemical Pollution

This includes all 'novel entities' or human-created substances that are not naturally occurring in the world. In relation to food systems, this includes pesticides and herbicides, possibly genetically modified organisms, and plastics used in food packaging.

Food and Nitrogen and Phosphorus Loading

Fertilizers applied to food crops contain reactive nitrogen and phosphorus. Not all of the fertillizer applied gets taken up by the plants but instead it leaches out into rivers, lakes and oceans. In a process called eutrophication, it starves aquatic life of oxygen, turns the water green, and causes dead zones in rivers and oceans worldwide, depleting their capacity to support life and provide food.

Food and Freshwater Withdrawals

Water is essential for life and is widely used in agriculture for irrigation. Some irrigation (such as spray irrigation) is very inefficient, using large amounts of water per calorie grown, in contrast to drip irrigation which is far more efficient. Excessive use of water for irrigation can impair or even dry up lakes, rivers and aquifers, damaging ecosystems and altering the hydrological cycle and climate.

Food and Land Conversion

Land that is converted for agricultural use depletes Earth's carbon sinks, destroys rich wildlife habitats and undermines the land's role in continually cycling water, nitrogen and phosphorus. The agricultural approach used also makes a difference, with large-scale monoculture having the greatest negative impact on ecosystems and nutrient cycles.

Continues...

Food and Biodiversity Loss

When land is converted for agricultural use, biodiversity is also lost, along with the biodiverse spaces where nature can live and thrive. The diversity of crop production has also been lost as crop varieties are reduced for large-scale production to drive efficiency, making crops less resilient to ecological shocks.

Food and Air Pollution

Exposed and dried-out agricultural soils are at severe risk of being eroded by the wind. This results in the loss of nutrient-rich top soil, and creates air pollution that can turn into dust storms.

Food and Ozone Layer Depletion

CFC gases that created a hole in the ozone layer used to be widely used in refrigeration, both in household kitchens and in cold-storage trucks and warehouses at the heart of global food supply chain logistics.

This is just some of the ways food is connected with the planetary boundaries. Food is also connected to many, if not all, of the social foundations as well. Try identifying some of these connections.

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