THE FRAGILE EARTH

Suitable for: Upper Key Stage 2 and older

Learning objectives:

- to demonstrates the fragility of our relationship with the soil;
- to demonstrate how humans depend on the soil to grow the food on which we all depend and how this is a sparse and vulnerable resource;
- to raise questions and classify them.
- to explore what makes a question philosophical
- to hold an enquiry into the chosen question

Education for Sustainable Development & Global Citizenship concepts:

Interdependence, Sustainable Change, Need and Rights, Citizenship and Stewardship

Materials

One eating apple and a knife.

Procedure

The teacher works with the whole group.

Take one apple and cut it into four.

Place three quarters on one side and one quarter on the other.

Ask the students what they think they represent.

Answer: the seas and the land.

Take the remaining quarter and cut it in half -

one piece, an eighth, represents the land not lived on by people, the other eighth is where people live.

Slice the one-eighth piece representing the land into four.

Set 3 aside.

These 3 pieces represent the land which is too rocky, too wet, cold, steep or with soil too poor for agriculture.

The remaining one thirty-second is the land which we can farm.

Now peel off the skin of the apple

This piece of skin represents the Earth's crust on which we all depend, and it is less than five feet deep. The population of the earth is 7billion

The following information will help students understand the importance of caring for our soil:

One third of all arable land was lost between 1980 and 2000.

It is estimated that between 2000-2050 another one third will be lost.

By 2050 the population is expected to stabilise at 10billion.

Generating questions

Ask the students in groups of four to generate as many questions as they can that arise from this information.

Ask them to classify their questions: Closed – answer known (tick); Closed – researchable (computer symbol); Open – requiring imagination (smiley face); Open – contains a concept to explore – philosophical question (smiley face with question mark above).

Swop sheets – do they agree with the other group's classification.

Discuss any disagreements.

How could we turn questions into philosophical ones?

What makes questions philosophical?

Ask them to underline the philosophical question they like the most.

Mad hatters/speed dating

Line up in pairs standing opposite your partner.

Take each underlined question and give them one minute to discuss.

Change partners by person at the top of the line on the right hand side moving across to the left and the corresponding person at the bottom of the left hand side moving across to the right. Everyone moves up to a new partner.

Repeat process until all questions explored.

Voting

Vote on which question to examine through enquiry.

