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Greener Greens?

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Abstract

Are current consumer patterns sustainable in terms of our planet's health? Do the food choices we make have a negative impact on climate change? Is the demand for farmland affecting biodiversity? Here, we the students of Confey College, report the findings of our investigations into these and other questions related to our impact on the environment at a local and global level.

Keywords

Sustainability, food production, biodiversity, climate change, global economics

Introduction

The project we describe here is based on real world activities where we, the students, decided on the data we needed to collect and the paths of our investigation. We sought to find out where the food we eat comes from and in doing so, realized that the unconscious decisions we make on a daily basis have a greater impact than we ever imagined. We learnt what it means to be an active citizen with responsibility in local and wider contexts by making substantive lifestyle decisions. Throughout the project we sought answers to our own questions about sustainable living and the impact we have on planet Earth. We also sought to include family and community in initiatives to develop awareness about more planet-friendly consumer practices.

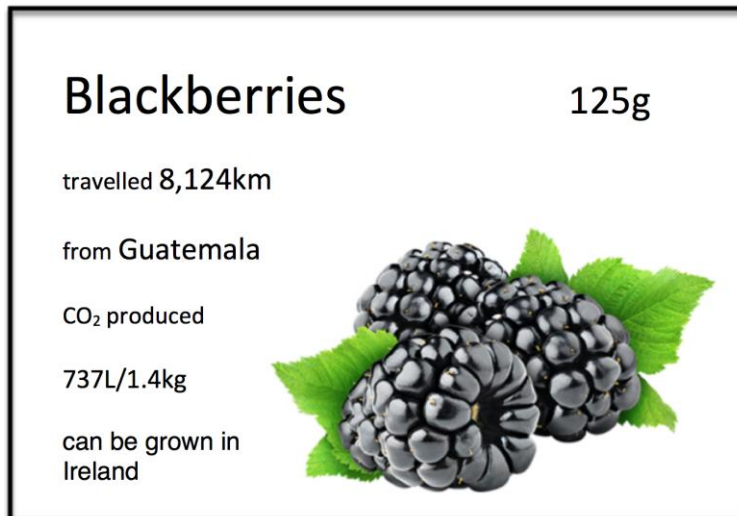
Implementation

Our project's origin was a sign over the school canteen that offered seasonal fruits for sale. These included apples, oranges, pineapples and bananas. We realized that we had no idea where these had been grown, and even if they came from Ireland. Our science teacher told us about life when he was young, before supermarkets, and what seasonal meant in those days in terms of what

was available. His stories prompted us to set a homework task to ask our older relatives about their childhood experiences so that we could report back to the class.

What developed was amazing as we have families from all over the World in our school. We heard stories about life in cities, towns and the country from Ireland as well as experiences in India, Africa, China, Eastern and Central Europe. We were surprised that so much we take for granted, such as clean drinking water and fresh fruit and vegetables, was and still is a luxury in some countries. Many of the stories were about the hardships our relatives had but there were funny ones too; like an Irish granny who was given a pineapple and, not knowing what to do with it, boiled it and served it as the main meal. We were reminded of our Irish history and how the tenant farmers' forced reliance on potatoes as their main food, outbreaks of potato blight, and the disinterested rule of the landlords led to the Great Famine (1845-1849) where over a million people died and the same number were forced to emigrate.

We decided we needed to know where the food we take for granted comes from and to do this came up with the idea of collecting food labels. Over a two-week period our classes managed to gather more than a hundred different labels. Different groups came up with strategies for recording the data we had but negotiations between us allowed us to come up with a final plan. We decided we needed to record the name of the food, its country of origin and mass. We were shocked to find that two of the bags of potatoes, being sold by an Irish company, actually were grown in France. Obviously, if the potatoes are imported their carbon footprint is much higher. We used the website <https://www.distancefromto.net> to calculate the distance the food had travelled; taking Dublin and the capital city of the country of origin as the start and end points of the journey. Our teacher gave us an excel spreadsheet that allowed us to input the mass and distance travelled to estimate the mass and volume of carbon dioxide produced in transportation.



One of our cards showing the data we collected

The best way to display our findings caused many an argument. Some of us put our data on Postit notes and stuck these to a wall atlas, others made flags and tried to get them to stick to a globe, another group made lists. All these methods had problems and in the end we decided, after much negotiation that the best way was to make cards with the information on and join these to the country of origin with string.



Joining our cards to the map

While we were doing this activity, we were surprised to see how marketing is used to fool us if we are not careful. A number of items had the Irish flag on the packaging and the words 'produced in Ireland' or 'packed in Ireland' underneath but then went on to list the country of origin as Vietnam, India, China or the North Atlantic. Importing food from abroad when it can be grown locally increases the amount of carbon dioxide entering the atmosphere. If we are to protect our planet we need to be more careful about what we put in our shopping trolleys and encourage our family and friends to do the same.

Our teacher brought in a bag of quinoa and told us that he had seen a documentary, (<https://www.youtube.com/watch?v=Hdl8tzldsDY>), that reported that importing this was leading to famine in Peru. We wanted to find out more and started to investigate on our Ipads. What we discovered was that the documentary was 'fake news'. Our teacher asked us to look through the documentary and list all the tricks that were used to make the story look reliable. After this we watched the Iceland advert, (<https://www.youtube.com/watch?v=3Ha6xUVgezQ>), about palm oil that was banned because it was regarded as too political. We were asked to find out whether palm oil production was really leading to loss of habitats in Borneo and Sumatra.

We carried out research with our Ipads into palm oil and deforestation and found the same message over and over again. Deforestation is leading to massive losses of habitat and this has a direct impact on biodiversity. It is estimated that there are only about 100,000 orangutans left in the wild. We used googlemaps satellite images to find native rainforest, palm oil plantations and areas of deforestation in Borneo and Sumatra. Our teacher asked us to look at satellite images of Ireland too and told us that in the past the farmland we could see would have been covered with ancient forest that covered northern Europe. He told us that in Ireland's past we had wild wolves, Irish elks, brown bears and a penguin-like bird called the great auk and all these have gone extinct because of our own deforestation. We learned that it is much easier to criticize than to find solutions to problems.

The Iceland advert stated that they were banning products containing palm oil from their shelves until sustainable solutions to its production could be found. We wanted to find out what things contain palm oil and so planned and carried out another survey in the supermarkets. We decided to bring in items that listed it on the ingredients label and make a display. This wasn't as easy as it sounds as some labels list their ingredients in other languages or have the comment 'contains fats and oils from tree nuts'. We were shocked to find out that palm oil is in so much that we eat, from chocolate to health bars, and from breakfast cereals to baby formula.

Out of all of this work we have developed another project. We are building a community garden in the school where we will grow plants that we can cook in home economics and where we can

work with people in the neighbourhood. We are raising money for trees that we are planting around the school and growing pollinator friendly plants to help maintain biodiversity in our own habitat.

In the final stage of 'Greener greens?' we decided to produce a short video that showed the work we had done. (http://www.confeyscience.com/greener_greens.html)

Conclusions

Our project started out of a simple sign about seasonal fruits but took us in a complicated journey around the World. We saw that we are surrounded by marketing tricks and real 'fake news'. The 'be healthy' 'eat your 5 a day' messages may be good for our personal health but if we don't look at where the '5 a day' are coming from we are damaging our planet's health. Some problems are easier to resolve than others. Deforestation around the World is unlikely to be stopped unless greater public awareness is raised and realistic alternatives are found that both support the wildlife and the communities that rely on the land for their livelihood.