

# Lessonplan for 8 to 10 year olds

## **Significance**

Understanding of climates and growing conditions.  
Recycling seeds (nothing goes to waste)

## **Learning objectives**

At the end of the lesson the children will know about the differences between climates and why plants grow in different areas.

## **Required materials**

Craft supplies  
2 pots  
Seeds + soil  
(shoe)box  
Powerpoint presentation  
Intro video

## **Introduction**

Intro to Seeds for Food + powerpoint

Months before, we show the kids 2 pots growing in different conditions. One is dry + in the sun + hot temp (desert climate) , the other gets watered + temperate sun + temp.

Later we examine the different effects on each plant which leads us into the lesson

Why do they grow differently?

## **Core**

Presentation on weather patterns in different countries  
Rainforest  
Desert  
Land climate (Holland)  
Sea climate

Differences between temperatures and climates:

Split off into groups, each group has their own climate. They research it and they make a box for their climate so they can collect seeds.

## **Conclusion**

Leave the boxes on the table, walk around and exhibit.

## **Geography lesson**

### **Significance:**

We want the children to know about the different climates all over the world and how it affects their lives, specifically their food. While they learn about this we want them to gain knowledge about Seeds for Food. They also have to get some compassion about other lifestyles and hunger. What are the effects of hunger in different countries, how are the children in these countries dealing with this, how can we as class help them?

### **Learning objectives**

At the end of this lesson, the children will be able to explain what influence the climate has on growth of plants and seeds.

### **Required materials**

- Short movie about seeds for food
- Pictures of different climates
- Piece of paper
- Pencils

### **Resources used to plan this lesson: (in APA form)**

<http://seedsforfood.one/home/seeds%20for%20food/index.html> - Willem van Cotthem

## **Introduction**

Discuss in pairs: What did you eat last night, what do you think the origin of the food is.

After that, we will talk about different climates, the teacher shows pictures of the different climates. The teacher tells them what climate it is and they have to find out what the aspects and circumstances of the climates are.

## **Core**

The children first have to make a mind map with the word climate in the middle, and they have to involve the different climates in the mind map. After that they have to

search the web for what the aspects of the climates are. They have 20 minutes to finish their mind maps, after that we are going to use the mind map in our further discussion, about hunger and seeds for food.

We will talk about the effects of the climate on the growth of plants and seeds. What are the consequences of living in different climate zones. We discuss the topic world hunger and the teacher introduces Seeds for Food and how they work. Show the video of Seeds for Food.

## **Conclusion**

Ask the children if they can bring seeds to school, so we can collect these and send them to the charity seeds for food.

## **Biology lesson**

### **Significance**

In order to create attention for Seeds for Food we need to have lessons on how seeds actually grow. We let the children plant their own seeds and when it's time to harvest they can send them to seeds for food.

### **Learning objectives**

The children know that seeds need to be planted in order to grow food, however they don't know the process of the growth.

-At the end of this lesson the children will be able to explain that seeds need water and fertile soil in order to grow into a plant.

-At the end of this unit, the children will have grown their own beans, dried them, and have sent them to seeds for food.

-At the end of this unit the children will have written a journal on the process of the growth of their own beans, this will be done in pairs.

### **Required materials**

Different types of bean seeds, glass jars, paper towels, water, soil in the school garden, a basic format for their journals, a worksheet on the basics of seeds.

### **Introduction**

The teacher already plants beans in a jar with paper towels and water 2 weeks in advance. When the lesson is started the teacher shows the plant and says something like: this is what we are going to do, can anybody tell me what this is?

The teacher talks about the goals and the content of the unit. How we will grow our own beans to send to Seeds for Food in order to help people who can't grow their own food.

## **Core**

### Lesson 1

The children receive a worksheet on the basics of seeds, how they grow, what is needed for them to grow, what kinds of things will grow. Etc. After this they will work in groups to make a small poster, they do their own research in the school library or on the computer in order to find more information. At the end of the lesson they need to be able to explain to the teacher what they have learned.

### Lesson 2

All children will have brought a jar from home, the teacher made sure there are enough paper towels and a large variety of bean seeds. In pairs, the children follow the instructions of the teacher and fill the jar with moist paper towels and a few beans. The teacher explains the basics of photosynthesis and that it is important for the beans to have sunlight. The teacher also explains that it is important for the beans that the paper towels stay moist all the time, and that it is the students responsibility to make sure this happens. They also start with the first page of the journal, they make a drawing of the jar and explain what they have done and what they can see. The teacher explains that they have to do this every day. The journal is not just a part of one lesson but they will get a few minutes every day to record the development of the beans.

### Lesson 3

After about 2 weeks, the plants will be taken out of the jars and will be planted in the garden. Here they will keep growing until the students can harvest their own beans. This will all be recorded in their journals which they will keep writing in until it's time to harvest. From a certain point they write every 2/3 days since there will not be a large difference in development every day.

### Lesson 4

When the beans are fully grown, the children go out to harvest them. They are washed and dried in the sun and are sent to Seeds for Food. They get time to finish up their journals and prepare them for the exhibition in the hallway to let the other classes see what they have learned.

## **Conclusion**

### Lesson 5

To conclude this unit, the children prepare an exhibition in the hallway to show their parents and fellow students what they have learned and done this week. How many beans they have grown and sent to Seeds for Food and talk about the whole process.