



Erasmus+



Biology lesson plan

Middle school

Topic: Seed dispersal.

Length of lesson: 2 x 45 min

Grade: 6

Learning objectives:

- to learn how seeds need to be dispersed to optimise their chance for survival;
- to understand that seeds can be dispersed by a variety of methods, including wind, animals and water;
- to learn about how the structure of fruits and seeds relate to how their seeds are dispersed.

Resources:

- Textbook
- Movie "Private life of plants: travelling"
<https://www.documentarymania.com/video/The%20Private%20Life%20of%20Plants:%20Travelling/>
- Article "Time travelling plants"
<https://askabiologist.asu.edu/explore/time-traveling-plants>
- Seeds with attractive fruits (cherries, plums), seeds with hooks, sycamore seeds, large seeds eg. acorns and/ or pictures of fruits

Methods:

- Individual work
- Group work
- CLIL

Class proceedings:

No.	Content	Time	Comments
Part 1			
1.	<p>Introduction:</p> <p>Teacher assesses prior knowledge by asking questions e.g. Why might it be better for plants to spread their seeds away? Can you imagine different methods through which seeds are transported? Do you already know one of these methods? What types of fruits do you know?</p>	5 min	By asking questions why it might be better for plants to spread out their seeds you eliminate the misconception that plants just drop their seeds.
2.	<p>Explanation that all plants rely on fruit as a means of seed dispersal:</p> <p>Students are given different types of fruits (or photos of fruits) and observe them. A teacher asks questions: Which seeds/fruits might be dispersed by animals and which by wind? What do seeds/fruits transported by water look like? Are they big or small? Are they heavy or light? Flat or round? Etc.</p> <p>Brainstorming: a teacher writes down students' ideas on the board.</p>	10 min	Students work in groups of 3-4.
3.	<p>Understanding that plants rely on a variety of methods when dispersing their seeds.</p> <p>The movie, part 1.</p> <p>Students start watching the movie: "Private life of plants: travelling". While watching they will see many different types of fruits (with seeds) and ways the seeds are dispersed.</p>	30 min	Students are encouraged to take notes.
Part 2			



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4.	The movie, part 2. Students continue watching the movie: "Private life of plants: travelling".	15 min	
5.	Understanding how the structure of fruits and seeds relate to how their seeds are dispersed. Students are supposed to list the ways of seed dispersal and describe the structure of seeds/fruits which are spread out in a particular way. Students work in groups with a textbook and the article "Time travelling plants". A teacher summarises students' work and writes down on the board the methods of seed dispersal with short descriptions of seed/fruit adaptations.	20 min	
6.	Learning new vocabulary. Students are given word search puzzles. They have to find 20 words related to the topic. Students circle the words and learn new vocabulary.	10 min	
7.	Homework. Write sentences with five different words from word search puzzles to learn them (e.g dormant, germinate etc.).		By writing sentences students learn and remember new words.