

Implementing the Compost teaching unit in Switzerland

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Introduction

The composting teaching unit is being tested this spring in a secondary school class (7th grade) in the Zürich area during three lessons within five weeks.

Composting experiments from the EU-project „WasteWaterResource“ (www.play-with-water.ch) were adapted for the curriculum. The teaching unit is still in progress.

Apart from testing the general suitability of the composting class model for the use in a Swiss school, the goal is to evaluate the gender- and language-specific responses of pupils to this teaching unit.

This poster presents first results.



Evaluation

Hypothesis: Inquiry based teaching, such as the compost teaching unit, offers an opportunity for pupils, who are not native speakers, or are otherwise weak students, to show their strengths.

Two methods are used to study this:

- A short pre- and post-test. The pre-test consisted of the following question: „What do you expect from the radish experiment and the compost model?“
- Observations during the class



The composting cycle as drawn by pupils before the first lesson.

Class profile

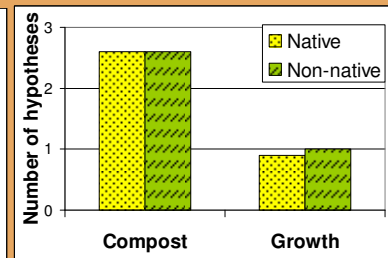
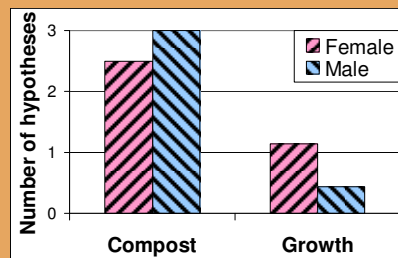
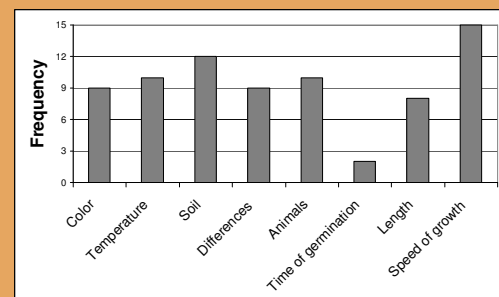
- **School:** Secondary School, 7th grade
- **Pupils:** 8 boys, 15 girls
- **Age:** 14 years
- **Languages:** German (18), Albanian (2), Bosnian (1), Spanish (1), Portuguese (1)

A mite drafted by a pupil

Teaching topics

- **Radish experiment:** Do the plants grow differently on compost and on ordinary soil? This experiment is suitable for a short teaching unit, as radishes grow fast: after half a week the first seedlings are visible.
- **Composting in nature:** Soil profile and soil organisms.
- **Composting model** in the classroom

Frequency of different hypotheses



Between the investigated categories (females vs. males; native german speakers vs. non-native speakers) were no significant differences in the number of formulated hypotheses.

Evaluation of answers of the pre-test

Example of an answer:

„Ich denke das die Radieschen bei der Komposterde schneller wachsen, und grösser werden. Jedoch denke ich das auch bei der normalen Erde Radieschen wachsen werden.“



Two girls study the soil structure



Taking the soil profile with the „Edelmannbohrer“



Radish seedlings after one week. Left: ordinary soil, right: compost.



Measuring the height of radish seedlings.

