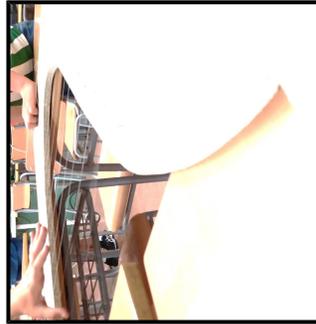


The Sound Igloo. Changing sound properties with strings.



Sound project, Escola El Sol i la Lluna

Objectives

- Improving their communicative competence in English, through a contextualized learning environment.
- Creating a string musical instrument, changing sound properties, using scientific content learned through inquiry methodology.
- Achieving both scientific and linguistic demands on each practice.
- Integrating new contents and vocabulary about sound qualities (pitch, intensity) and about materials used in strings or sound boxes.
- Using language structures needed in an inquiry based science methodology.
- Working in cooperative groups to create a final product useful for their educational community.

Proposal description

A big challenge: making a string musical instrument that has not been invented yet. In cooperative groups, through inquiry based science in English, using language structures and vocabulary related to sound qualities and properties, pupils are given models to make hypothesis and learn together about sound.

Methodology

An inquiry based science in English methodology requires scientific conversations and a strongly planned linguistic supports. A connecting web on the wall was our most valuable resource to share vocabulary or contents. Planning classroom materials, environment and opportunities to speak and interact are a priority. The students were working in groups of four, having different tasks during the project, and the result is the product of a group of 18 students.



The project main activities are:

1. “Sons d’allà enllà” workshop
2. Observe a model and try to explain how we can change sound.
3. Create their own model and hypothesis about how sound qualities have changed
4. Get to some common statements about sound qualities using different strings and sound boxes
5. Inventing and building a new musical instrument: a sound igloo.

Resources

- “Sons d’allà enllà” workshop, carried out by Joan Planas
- Tuner apps with tablets
- A model soundbox with rubber strings
- Different size and material boxes and strings
- Connecting web on the classroom wall with linguistic supports
- Wood panels, strings, paint and bricolage tools

Attached documents

Teacher’s documents:

- Teachers’ guide
- Poster of the experience

Student’s documents:

- Base document for the music workshop
- Asking and answering questions. How can we change sound?
- Inquiry planning sheet
- The sound igloo. Igloo groups proposal.

Authorship

The project was carried out and catalogued in 2017 by Isabel Graells and Glòria Rincón, both teachers at Escola El Sol i la Lluna, in Castellar del Vallès, Catalonia, Spain and the students from the Primary Education graduate degree at UAB Aida Banyuls and Anna Martín, acting as teacher assistants. The school has been part of several educational innovation projects, especially in the approach to learning foreign languages.

