Student-generated digital stories for 21st century knowledge creation

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CICERO LEARNING

Crossing borders across schools and countries

- FINNABLE 2020 (Boundless Classroom) & SAVI international projects
  → to explore the added value of digital technology integration into classroom practices; to promote active learning and knowledge creation; to motivate and engage students
- In both projects, students created short video stories collaboratively. Having designed, captured and edited stories, students shared their work with peers online.

literacies

digital literacies

networking literacies
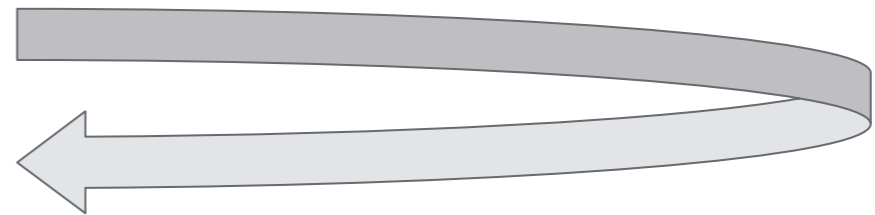
- language, image, sound +

- work in groups +

- connective technology +

- digital mobile devices =

- digital story

collaboration

sharing

digital storytelling as pedagogical method

3
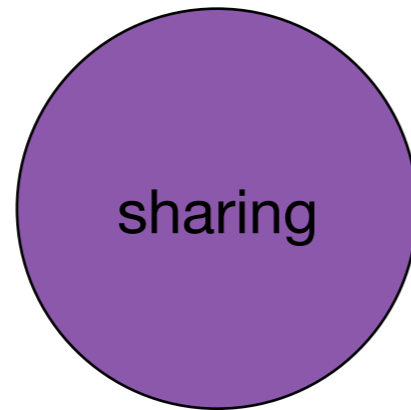
- a digital story is ...

  - <1-4+ minutes long

  - image, moving-image production

  - produced during and/or at the end of a series of lessons

  - content

    - landscape + text, voice over

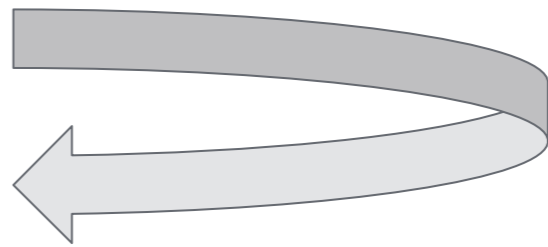   - other modalities (e.g., subtitles, sound, music, effects)

the

analysis

of 106

stories

shows...

indirectly related to the curriculum

- Self-presentations

  - e.g., introducing, welcoming etc.

- Life & culture

  - e.g., daily life & activities, traditions

- History & mythology

  - e.g., ancient myths

- Physics & chemistry

  - e.g., movement, water, air

the content of digital stories

directly related to the curriculum

	Single event stories	**Multiple event stories**
Subject-based digital stories	Instances of a phenomenon • Chemical reactions	Multiple-phenomena based stories • Science subjects: water, motion, air • Humanistic subjects: historical events, biographies, languages
Interdisciplinary digital stories	Instances of an interdisciplinary phenomenon • One event in a forestry in a field trip	Theme-based stories • Recycling • Well-being • Myths • Animal testing
Student-initiated stories	Introducing myself and my class to peers	Instances from everyday life • Hobbies • My friends • Ethical issues • Citizenship

ancient myths

teaching aims :
to enable student understanding of the phenomenon of season alternation
through comparison

to connect with related issues e.g., disruptions arising from environmental problems
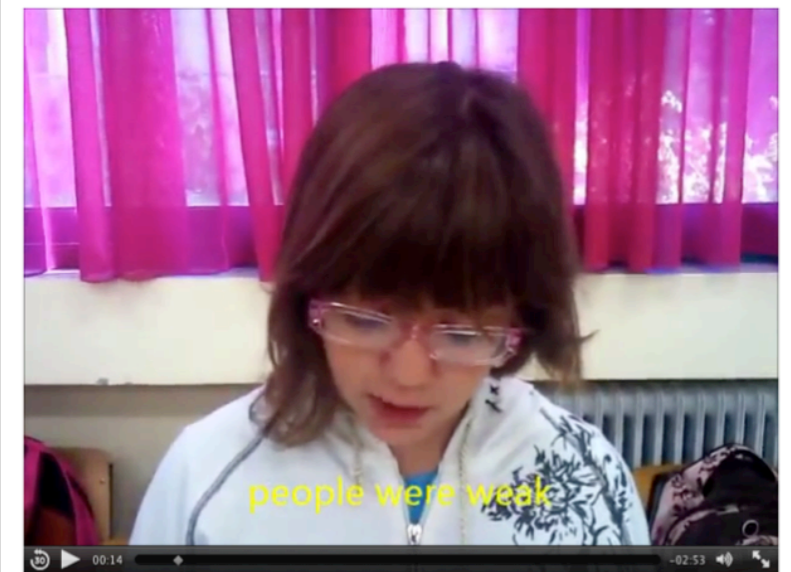
film outdoors   revise, edit to improve   narrate to support storytelling

a digital story can draw directly or indirectly from the curriculum

subject domain: history & mythology

teaching aim:
to enable student online collaboration with international peers

share stories online   expand audience   create interaction

A story of interdisciplinarity

History & mythology
how the ancient Greeks used myths to explain natural phenomena

Language: L1, Elf
narrating events in chronological sequence : temporariness in progressive tenses

Digital stories for history & language: a structural analysis (i)

Pluto is walking around on the Earth

Persephone and her friends are playing

Pluto wants to get married and is asking Zeus

Goddess Demetra is crying and putting Nature to sleep

Hermes is asking Zeus to help

Hermes brings Persephone to Demetra but Pluto claims her back
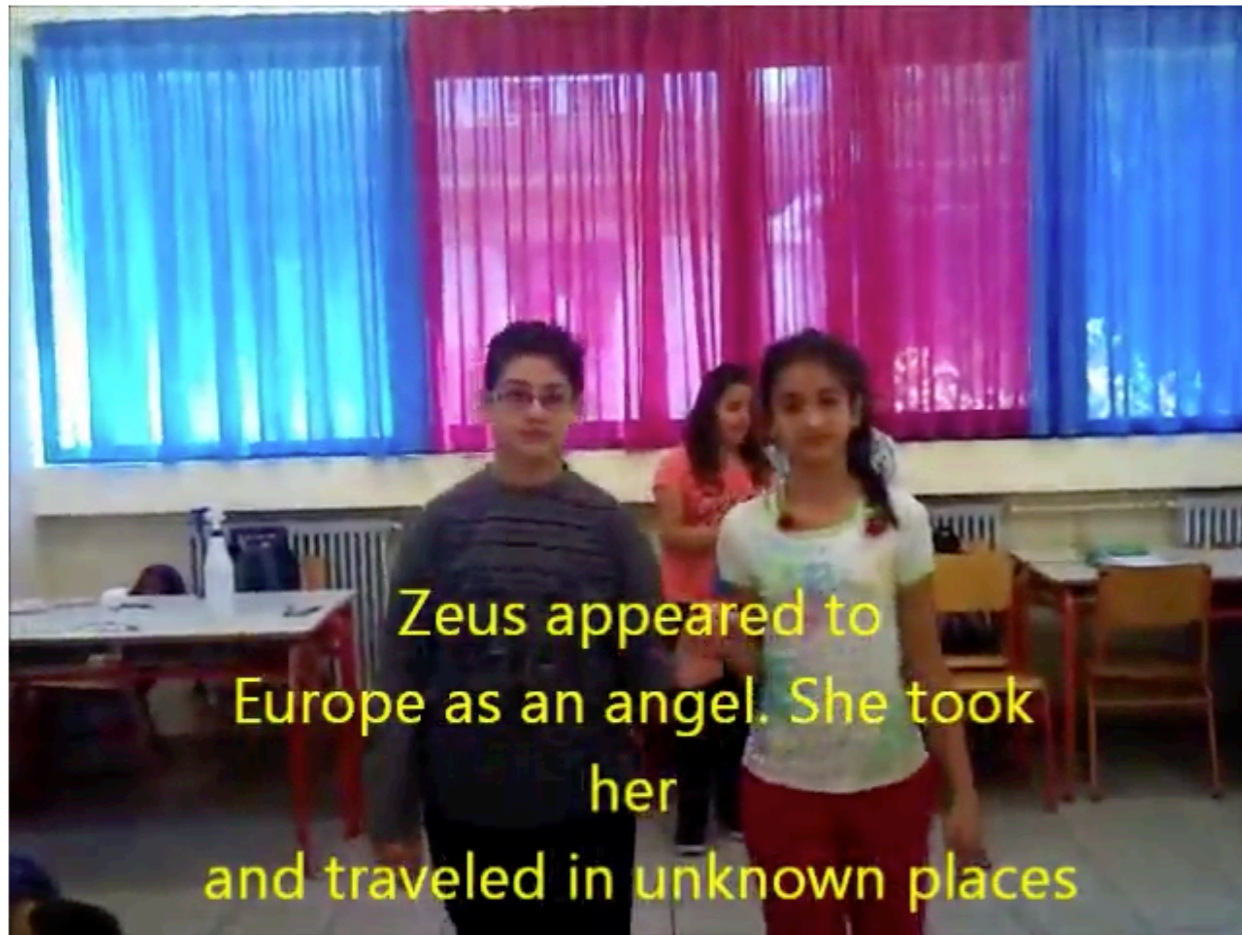
text alternates with moving image (x 9)
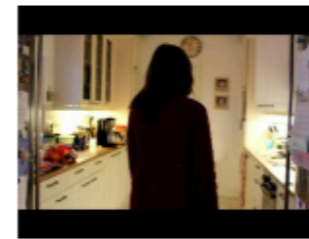dramatization supports dialogue (4-9)
duration: 5:31

Developments in narrative production

A group for sharing between CDS, San Francisco and Thessaloniki, Greece!

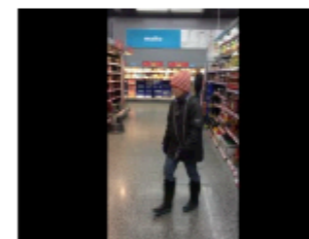**Europe, the birth of Euro (3:07)**
dimitris.konstantinou 2012/11/19 00:00

|<   <   2/2   >   >|

Zeus appeared to
Europe as an angel. She took
her
and traveled in unknown places

Recycle Video By Linr Melisa (1:22)
linnea.toivanen 2012/ 16:05

Recycling is very imp

Welcome to movie (1:
dimos.hamouroudis
2012/11/23 12:24

Meri`s and Susanna`s recycling-video (2:02)
meri.seppälä 2012/11 11:24

2012

Bio bag (2:13)
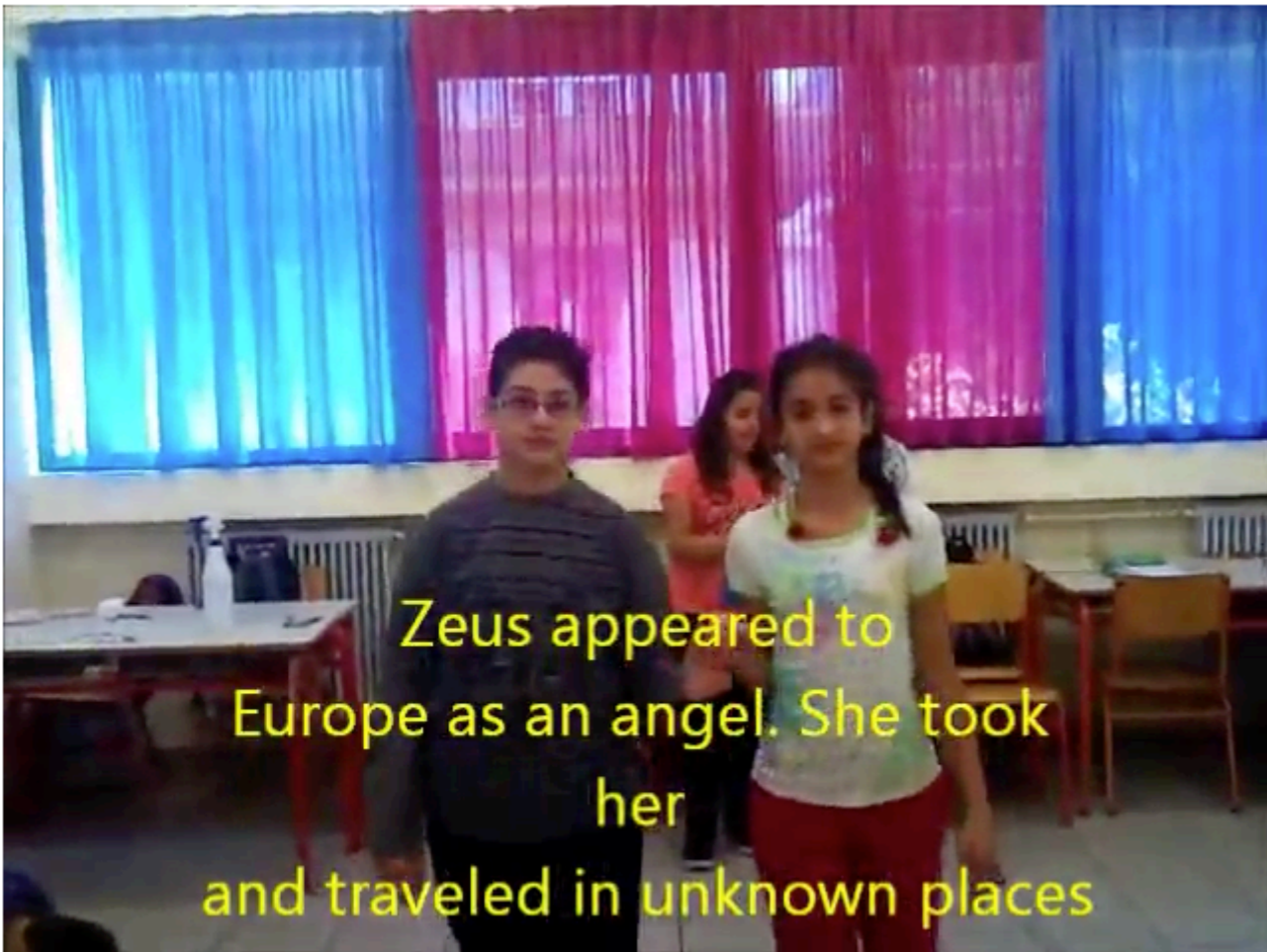peetro.hagström 201: 10:57

Cans recycling (1:07)

Text unfolds with moving image :
as narration (L1) &
as subtitle (Elf)
dramatization, narration and written text
duration: 3:07

Titles & Signature

- Europe and angel
- The end
- Blue team

Zeus appeared to Europe as an angel. She took her and traveled in unknown places

Europe, the birth of Euro (3:07)
dimitris.konstantinou 2012/11/19 00:00

Money named

2:20   -0:47

Europe was crying because she saw the poor people

1:47   -1:11

Language: L1, Elf
narrating events in chronological sequence
past tenses

A structural analysis of digital stories (ii)

Once upon a time

The gods were kings

people were weak

Europe was a very rich princess

Europe was very selfish so she dismissed all her (helpers)

Zeus appeared to Europe as an angel. He took her and traveled in unknown places

Europe was crying because she saw the people who were hungry

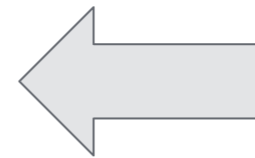As tears were falling down, the angel was blowing and his breath was becoming 'money'

(The) money (was) named 'Euro', after Europe's name

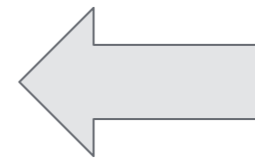(The) poor people came back and Europe changed her attitude for ever!!!

Connected discourse
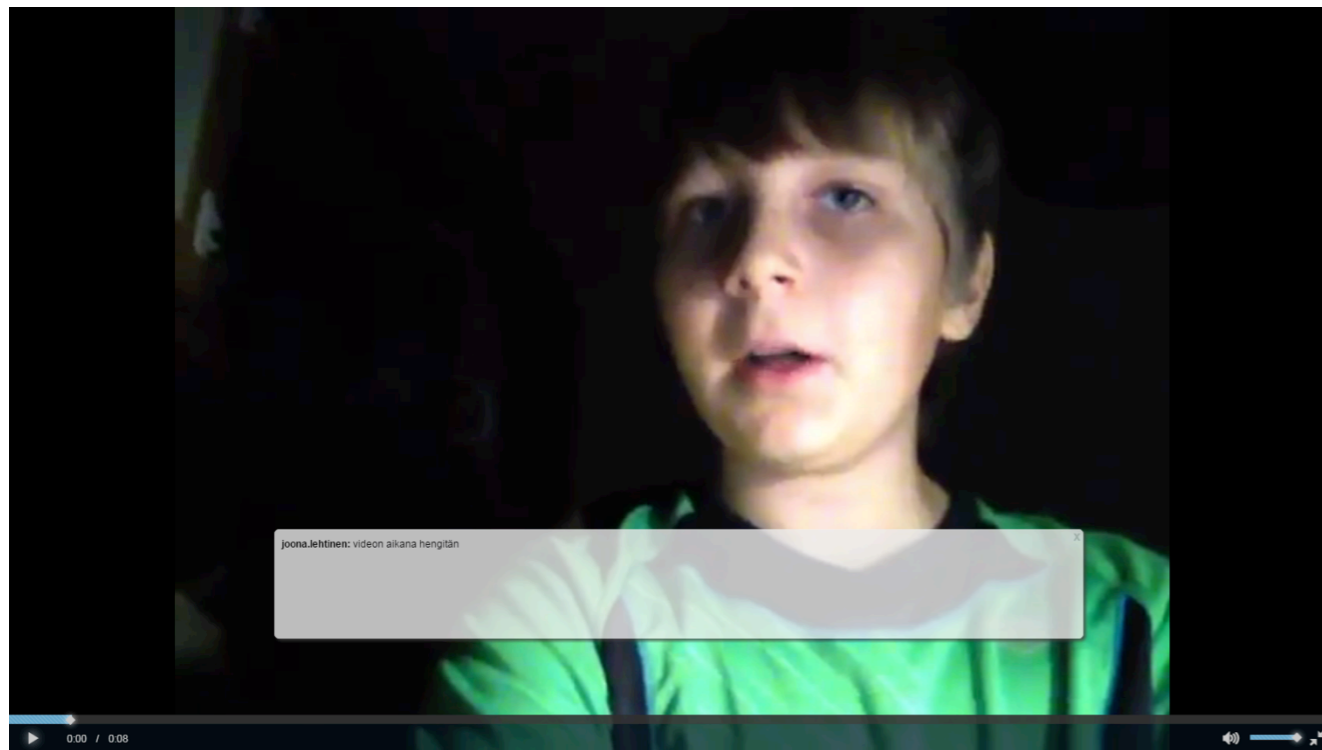
Red balloon (Investigating air)

cover picture of the DS

1. Need for air and sensing air
2. Properties of air
3. Air investigation in Heureka
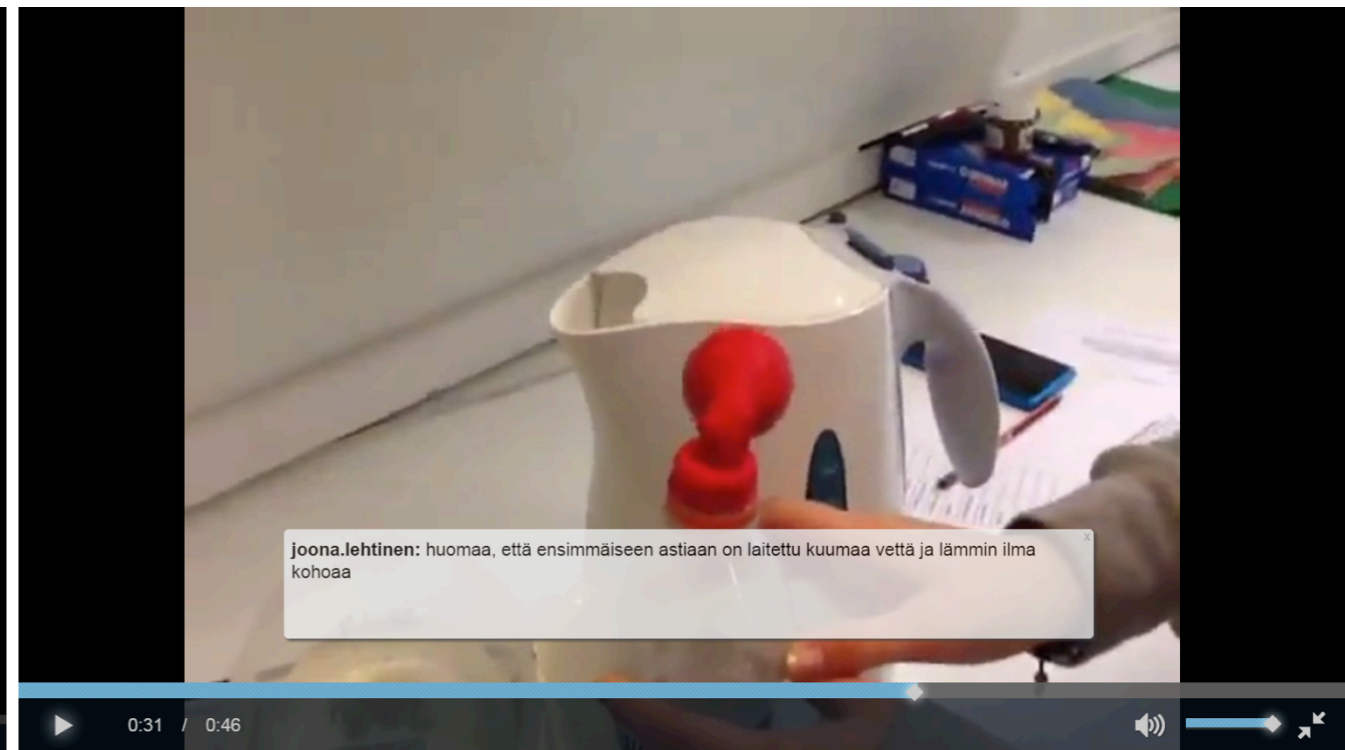4. Air pollution and cleaning

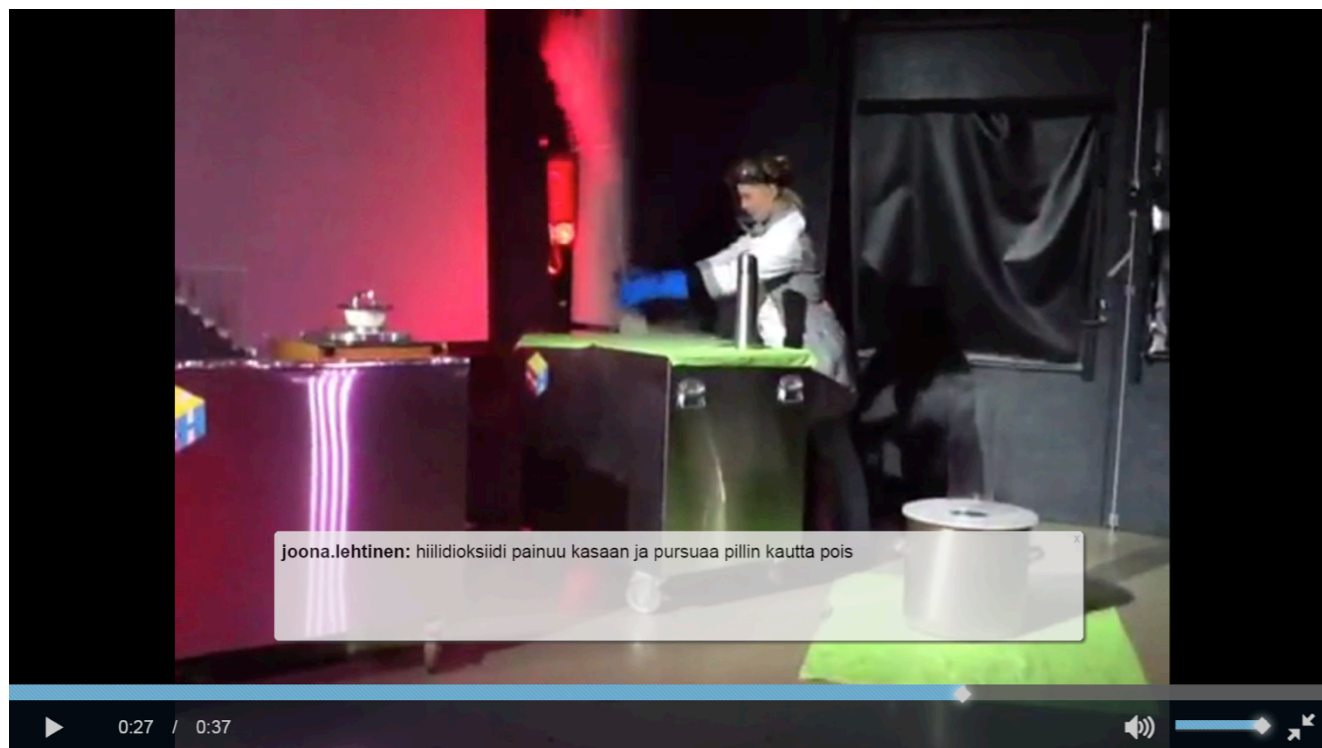four sequential parts of the DS, headlines named by pupils
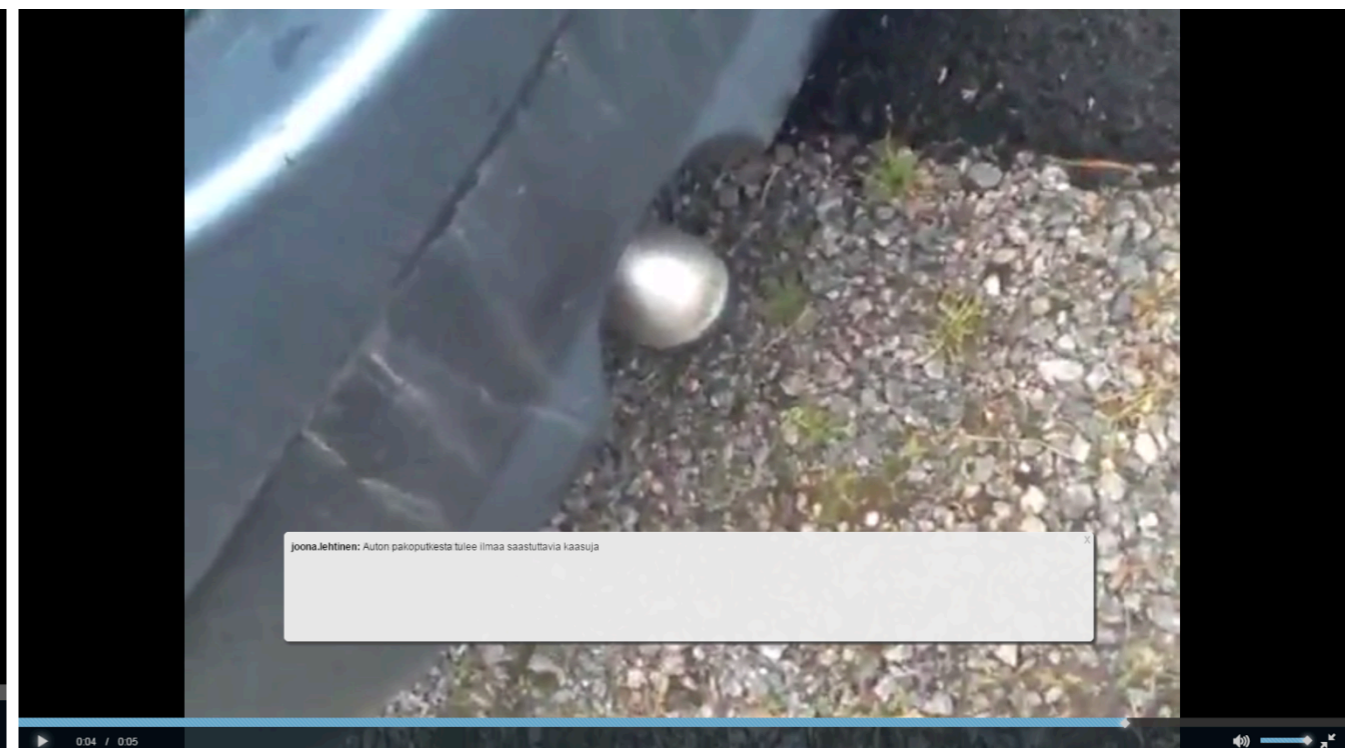
Red balloon (Investigating air)

1. Need for air and sensing air

2. Properties of air

3. Air investigation in Heureka

4. Air pollution and cleaning

subject domain: sciences

teaching aim:
- to *identify, classify and compare natural phenomena* (properties of air and water, mechanics, chemical reactions) by doing own investigations about the topic in pairs → learn to use the language of sciences
- to *film own investigations* → learn sciences through the camera lens
- learn together in *collaboration* with others

digital story is a documentary learning diary that is created during the lessons

Frame of learning sciences by creating digital stories

1. Pre task: recording video clips in the schoolyard or at home
2. Lessons 1-2: investigating the topic, recording video clips about experiments (classroom)
3. Editing video clips in ICT class
4. Lessons 3-4: investigating the topic more, recording video clips about experiments (classroom, trip to science center, trip to science laboratory)
5. Editing video clips in ICT class
6. Extra task: recording video clips during holiday
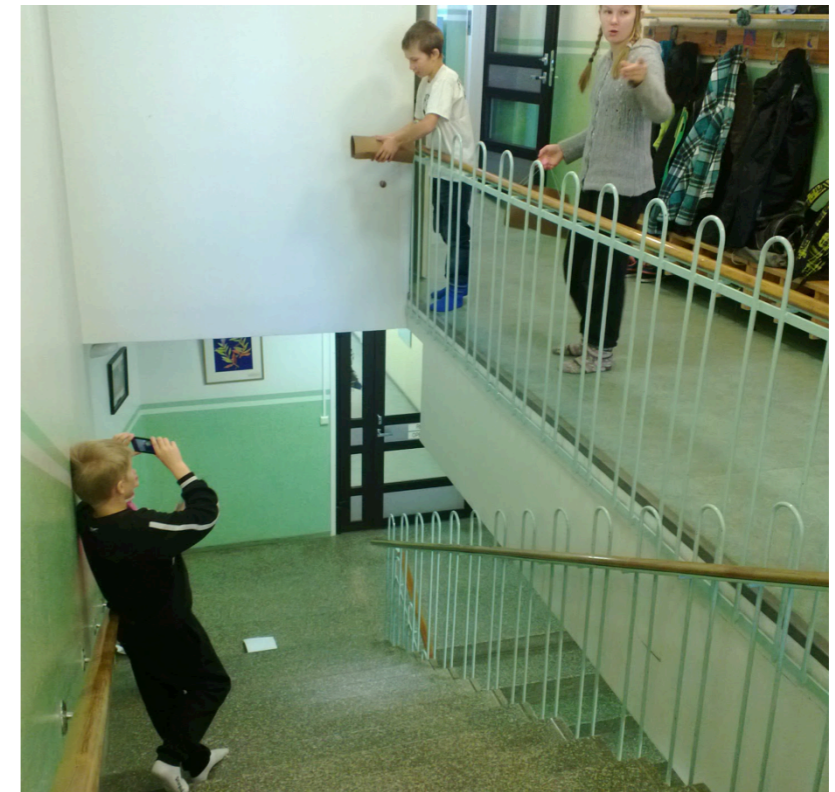
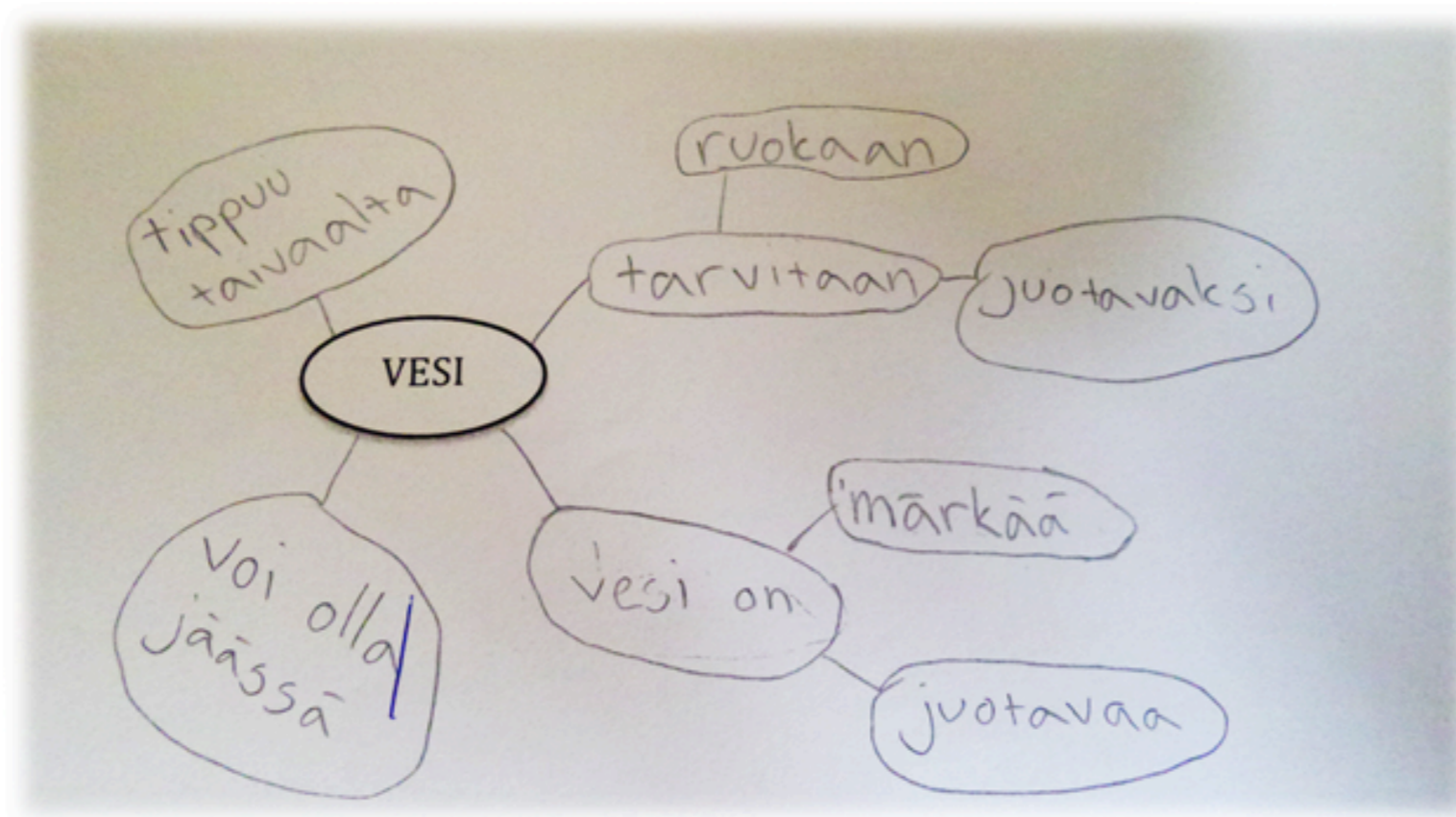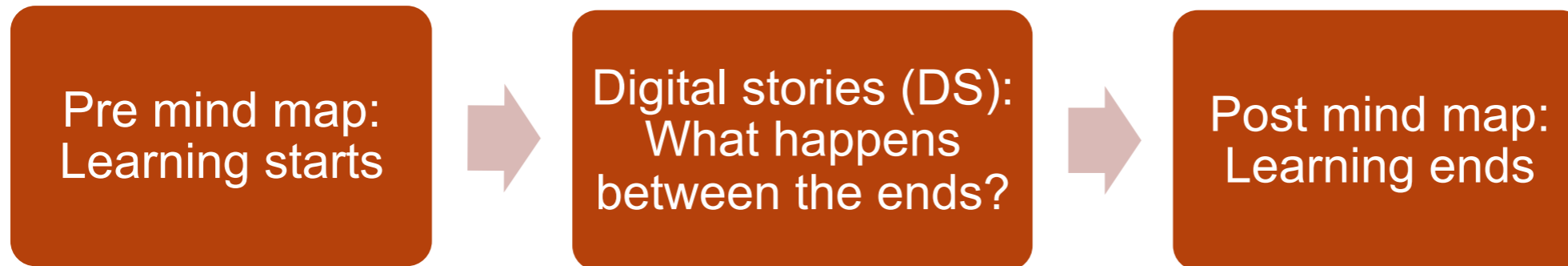| Digital story: Red balloon	Video clips in the digital story	Annotations and pupils' talk during the video
2. Properties of air	3. A table napkin in a glass remains dry althought the glass is put under water.	Air bubbles remain in the glass. — Now you can [start]. / It is there.
	4. A balloon is fastened on the mouth of a bottle. The balloon swells when the bottle is in hot water and contracts when the bottle is placed in cold water.	Notice that hot water has been placed in the first container, and warm air rises. — It is dry. / Then, put it to cool.

Watching part 2 of the digital story, Red balloon

Evaluating learning outcomes

1. analysing mind maps

| Pre mind map: Learning starts | → | Digital stories (DS): What happens between the ends? | → | Post mind map: Learning ends |

Results

- Direct connection between the mind maps and the digital story 59 % (24/41)

- From everyday observations and conceptions to more scientific ones

Relationship between students' mind maps and digital stories (DS)	%
Topics on post mind maps and DS are similar	46
Topics on pre mind maps and DS are similar	13
Evidence of learning in annotated (= speech bubbles) DS	11
A drawing in the post mind map about some topic of the DS	9
Pupil learns by watching a DS created by the pair (appears from the post map)	9
Pupils mix contents from their personal pre mind maps to the common DS of a pair	4

digital storytelling in the future

- As pedagogical method promotes
  - Student learning of subject matter
  - The communicative use of English for international communication
  - Peer networking & collaboration online & locally

- As tool in teacher education
  - diary for reflection
  - learning database for student-teachers & teachers

thank you for your attention!