OPEN LESSONS - ART THINKING

IES SINEU – CURS 2018/19

Sebastià Sastre Guasch

Contextualization

The realization of open lessons is framed within the *Art Thinking* training of the ERASMUS program of the IES SINEU.

The open classes detailed below were developed in the subject "*Information and communication technologies"* of 4th ESO, and in the module "*Local Networks"* of the 1st course of high education in Micro informatics and networks.

Goal

Awareness of the environmental and social impact associated with the use of technology, as well as explore possible solutions and awareness campaigns.

Contents

- 1. Processes of manufacturing of computer technology.
- 2. Annual manufacturing of computer technology.
- 3. Recycling of computer technology.
- 4. Social problems derived from the processes of production of computer technology.
- 5. Environmental problems of the production processes of computer technology.

Timing

Three sessions have been held in the third week of May, a session with each group and a third one with all the groups together:

1st Session (55 min): Friday May 17. 3rd Hour, Classroom 105, ICT (4th ESO)

In this first session the physical space of the classroom is configured by a North-South division, which simulates the inequalities of access to the technological resources of the North and South hemisphere of the world. In addition, in the middle of the class, we find a great deal of broken and obsolete technology material that is equivalent to 10% of the total weight of classroom technology. This 10% equals the percentage that it is not possible to recycle and therefore accumulates.

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Initial provision of the classroom:

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After receiving the students, we invite them to discover why is the classroom configured that way, and what it can mean. We follow the activity with an online research on the manufacturing processes, recycling and world distribution of technology, with the support and guidance of the teachers.

The next step is to discover and calculate the annual weight that represents 10% of all computer technology manufactured annually, which is the 10% non-recyclable that will be accumulated.

Once we discover the weight, we look for references that help to understand the dimension of the problem. In our case we attach it to the weight of a 100 floors skyscraper, since the accumulated 10% is equivalent to several buildings, and in a few years we could build large cities made of technological trash.

After the calculations are done, students are invited to make models of buildings using the technological trash (with projected examples):

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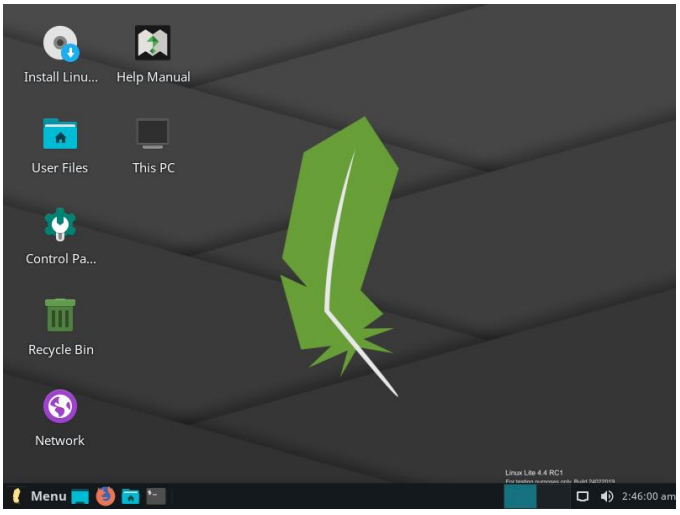
2nd Session (55 min): Monday 20th of May. 1st Hour, Classroom 213, Local Networks (1st CFGM Computing)

In this second session, the experience with the students of the first cycle is repeated, but with a different ending dynamic, more aimed to finding software solutions to extend the life of the technology. Some examples could be the Linux LAKKA distribution that converts old computers into video game consoles, or the Linux Lite distribution that allows functional office equipment with very basic hardware features.



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IES SINEU – CURS 2018/19

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3rd Session (55 min): Wednesday, May 22. 5th Hour, Classroom 211, Local Networks (1st CFGM Computing) and ICT (4th ESO).

The aim of this session is to share the discoveries of the two groups. Also to make joint dynamics where the knowledge and the proposed solutions are shared. Finally we explore possible awareness campaigns to reach all the community.

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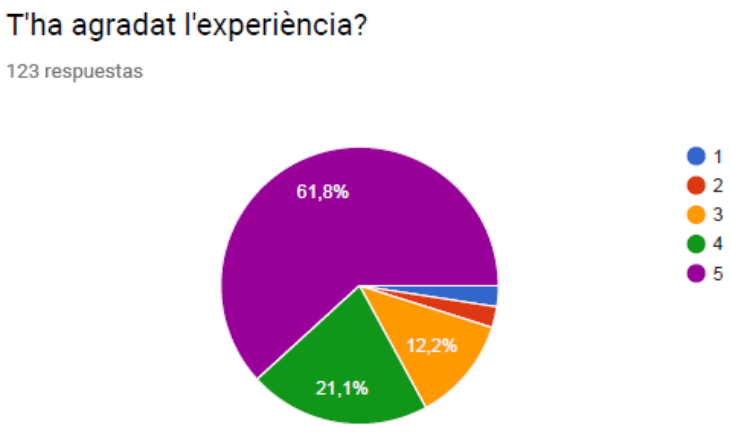
Evaluation of the sessions:

The students created a survey in order to evaluate the sessions.



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