Never enough time

Electronic literary exercises in an Italian lower secondary school

Introduction

Choosing the "Guido Reni" lower secondary school[1] *has been less adventurous for the researcher than choosing her primary school. In fact, it has been a rather "comfortable" solution. The school is well located in the centre of Bologna: no trains to take, just a bus from where I stay and a 10 minutes walk under the arcades of Via San Vitale, one of the ancient beams irradiating from the centre of the city to the ancient town "belt" of walls.*

But there were two more reasons to push me to this choice. The first one: Giuliano Ortolani, whom I had identified after a few calls from Liège as one of the initiators of the Kidslink[2] *network, is a teacher there. To be more precise, he is the "technological operator" for the school. "Technological operators" are one of those transversal figures in the Italian school system revealing the serious demographic problem that the Country is experiencing. Formerly a teacher of "Technical applications", he dad to give up his post because of the reduction of the number of classrooms in school, due to the dramatic decrease of birth rate in Northern Italy, especially in Bologna*[3]*. But since teachers and professors are public functionaries and cannot get fired, they are usually reconverted in other roles, in the school itself, or in the Public Administration. Giuliano Ortolani has then been sent from his former school, which has been entirely suppressed, to the "Guido Reni".*

The second reason for my choice was Fabrizio[4]*. I met him in Brussels at the Cresson Conference last December. He was a "sample" of the young user of e-mail and Internet in school. Invited by the organisers as one of the two "representatives" of students. The other one was an English boy from some prestigious Boarding School, 18 years old, jacket and tie, professional manners. No wonder Fabrizio was the big hit of the*

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1 The last three years of compulsary education in Italy (11 to 14years old children).

2 See box in the text.

3 First city in Europe to have reached the record of larger population of over 65 years old than that below 15 years old.

4 Unlike for teachers, the names of children have been changed, to respect the infant's anonimity.

Conference: 13 years old, rather small, enormous brown eyes, sweat-shirt and jeans, he had presented (in Italian) the activities developed by his school in the framework of the Kidslink project, together with Ortolani. Very calm, without reading but looking straight at the audience, modest, simple and clear in the explanations, he had enchanted everybody as some fresh air would do in those windowless stuffy rooms. Even the interpreters, at the end of his speech went up to him to compliment him for his clearness and his pace of speech. "If everybody were like you, our job would be an easy one!". Then at night, at the big reception in that big luxurious hotel somewhere in Brussels, I was sitting next to him in one of those round table equipped with far too many forks, knives and glasses. It was clear he had never been in a place like that before. Its amused look and fresh conversation, his jokes and clever observations had saved the night, which could have been otherwise quite hard. So, the idea of seeing him again in action, but this time in his element, quite appealed me.

This report is partly a journal and partly a selection of "rough" materials (notes and interviews). It does not present an elaborate analysis of the experience observed, which is developed in the Mailbox Synthesis Report. It was difficult for me to write a story, as I did for the primary school, because the observation had to be very fragmented. As fragmented as the secondary school is. That is why I chose to present here a mosaic of different moments which are difficult to link in a continuity. They may lead us to develop some reflections on the multitude of rationalities and contradictions which can be at the basis of the setting up of an ICT experience in a secondary school and on the constraints of time which can affect it. I am not saying that nothing happens when ICT is implemented in a secondary school. What I am saying is that it seems more a story of adapting ICT and its uses to the school structure than the other way round. ICT opens a breach and reveals the rigidity of the secondary school organisation. Even when the experience is rich and articulated such as it is in this school. Even when most of the teachers are aware of the changes required by the introduction of ICT and motivated to pursue this objective, under the impulse of a charismatic leader.

My first day in "Guido Reni"

The appointment with Ortolani the first morning is at 8 o' clock in the Computer lab, starting time for the school day in "Guido Reni". Another early morning, alas!

I arrive at ten past eight: the "3D" classroom (13 years old) is already at work. In small groups, each one with a specific task, pupils are finalising the materials (images and texts) to send via e-mail to the other partners in the framework of a Comenius project. The theme they are developing is: "My Country in the 20th Century".

Ortolani is walking among the different groups to help here and there and solve all rising "technical" questions. The teacher of French, Luisa Barbieri, is bending on a trio, laughing with them. Fabrizio waves his hand when he sees me, then he comes up to me, we shake hands and he goes back to his place. Ortolani comes up to me, welcoming with an open smile: "Very good! It is the big chaos today. It is the end of phase 1 of the Comenius project, and we have to fight as usual against the school bell to finish what we have to do! Find your place, wherever you want". "Do you bother if I walk around?" — I inquire. "Of course not". Actually, everybody is walking here and there at ease. School has changed, or maybe, is it just the Lab?

I start taking notes, almost unnoticed. The children (21) are only partially curious about whom I might be. After a short while, they actually seem to have completely forgotten about me.

The first thing that strikes me is the way children dress. Very colourful, sweat-shirts, United Colours of..., a sort of metaphysical uniform. All but one, wearing a white cotton shirt buttoned to the neck, a V pullover in cashmere, grey flannel trousers. A (shrivelled) historian on Sunday morning... The President of the Republic (also shrivelled) in his library room for the Christmas wishes on television... Francesco Paolo D'O., "the one whose grandparents used to eat foxes for breakfast, while the others were eating potatoes and beans", Ortolani half joking and half seriously explains to me. Entering now his adolescence, rather short, a bit round, a shadow of moustache and a voice uncertain between being manly or childish. A miniaturised adult. I am impressed and puzzled.

Girls are more anonymous at a first glance. They work in pair in front of computers, like most boys do. But they look more "intertwined" with one another than the boys. Sometimes I have the impression they are just telling each other the latest secrets and gossips, instead of working. I might be wrong. But their attitude to one another is extremely intimate and the computers seems a good pretext to sit next to one's own best girlfriend. Among the boys, there is more competition, more rivalry, much more aggressiveness.

The noise level is rather high, if I compare it with the standards of my memory. The control by the teachers is exercised very loosely. I admire their resistance to the volume.

The hour goes by quickly, the French teacher has to leave, because the teacher of Italian has to come, and stay with the same class. They have not finished all the work. The end of phase 1 is postponed. *Rendez-vous* next week.

I have a feeling that, for some reason, the miracle of my "flirt" with Panico will not be repeated.

The school

The recently renovated building is located in the medieval centre of Bologna. A wide entrance hall, three floors, with 16 "regular" classrooms. On each floor, a sort of ward presidium, from which two members of the non-teaching personnel control the excesses of vitality of children in the corridors and assist for all sort of logistical needs. A part from the 16 classrooms, there are also 3 special rooms with special equipment for handicapped pupils. In Italy, they are integrated in the normal school system in reason of no more than five per class of twenty-five, and are usually assisted by a "support" teacher during regular class hour. Then, there are two special rooms for artistic and musical education, a library, a gymnasium and 4 labs. The language lab has 25 seats equipped with microphones and earphones. The scientific lab is equipped to run experiments on chemistry, physics and natural sciences. The audio-visual lab is equipped with material for the production of audiovisuals (still and moving images). Finally, there is the computer lab.

The general impression one may get is of a certain modernity, which is still not so frequent in Italy, a country where urban school buildings and universities so often occupy ancient monasteries, prisons, or even "palaces", usually in strong need of restoration. In this school, there are only a few vestiges from last century: a couple of shelves with glass doors are placed at the entrance of the corridor of the first floor, just outside the audio-visual lab, exposing a series of stuffed animals, just like in a Natural Science Museum conceived in the nineteenth century.

The school hosts children from every social class, but with a strong dominance of medium-high bourgeoisie. A part from the teachers originally allocated to the school, part of the teaching personnel comes from a school in a working class area of Bologna, which has been suppressed for the insufficient ratio of children. Giuliano Ortolani is one of them. In their former school, those teachers had developed several activities suitable to motivate their children, among whom quite a few could be considered "difficult" cases. Among those activities, there was the Kidslink project. That was one of the schools in which the project was initially experimented and produced the first encouraging results. When Ortolani was reallocated to the "Guido Reni", in spite of the absence of computers, he decided to try to pursue these activities in the new environment. An environment, which has far less integration and adaptation problems and where "difficult" cases are minimal.

The Kidslink project

Launched in 1990 by two researchers in astrophysics in the National Council for Research (CNR) based in Bologna, on a pure voluntary basis, Kidslink original aim was to link some of the schools of the city and province of Bologna, through the server of the CNR, to allow the children to exchange messages on themes that particularly interested them, with children all over the world.

The success of the experience and the enthusiasm shown by a lot of teachers (and by the children) made it possible to overcome the numerous financial and structural problems: the experience is growing in number of spontaneously participating schools and richness of activities.

For further information, see the kidslink web site at: http://kidslink.bo.cnr.it.

The first day I was in "Guido Reni", I had the chance to come across the school principal. She entered the well equipped computer lab and the scene took immediately surrealistic connotations. The principal is a lady in her late fifty, early sixty. She looks like a living portrait of a principal, who could be drawn from "Cuore", the famous last century novel by Edmondo De Amicis set in a school, in which the poor is good and dirty, the rich mean and clean, teachers either devils or angels and principals, inevitably severe and austere. When she entered the class, nobody paid too much attention to her, nor she did pay any attention to the children neither to me. She pointed straight to Ortolani to consult him on some school matter. Apparently, she does it very often. She trusts him blindly. "One day" — he said to me — "I gained her unconditioned trust. I don't know how. I managed to convince her to invest a big portion of the donations received from some banks to purchase the computers you see here".

In fact, 30.000.000 Liras out of the 50.000.000 received have been spent on technological infrastructure. The Principal is not interested in technology, she probably has never touched a computer with her hands, but she trusts Ortolani. If he thinks it is good, it must be good. She might also think that, after all, it brings some prestige to her school. And behind her rustic look and manners, there is a lot of energy and devotion to the school.

The Computer Lab

The computer lab, in which the activities related to e-mail and Internet take place, is equipped with 11 computers and 11 printers[5]. All computers are linked to the server Kidslink through a UUCP connection system. Since last November (1997), all the children have their own e-mail address. The lab is accessible during normal class hours, according to the calendar established among teachers at the beginning of the school year. Each class has at least one activity per week taking place in the lab.

The desks are all oriented in the "classical" way, that is, towards an imaginary teacher's table. In reality, both the teacher present and Ortolani walk around the class all the time.

In spite of the classical configuration of the room, there is a high degree of freedom of movements during the activities. Children are usually organised in small sub-groups, decided either by the teacher, or autonomously by the children themselves, depending on the type of activities. Sometimes the groups may be made of three people, sometimes a child may be alone. The most common case is two children per computer, usually girl with girl and boy with boy. Although it may happen to see a boy alone, I have never come across a girl sitting alone in front of the computer.

A computer in the hall?

Ortolani has proposed to the principal to put a computer in the hall with an e-mail connection, so that children can check their mail whenever they wish during school hours. So far, the proposal is supported by the majority of parents. It will however be necessary to formalise the decision through a deliberation by the Board of Professors. Among them, there is some resistance. Motivation: that could give the children another good reason to temporarily abandon the classroom, a part from the already consolidated practice of going to the bathroom!

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5 At the moment this report is made available on the web, the situation has changed. The school has benefitted from the new Action Plan launched by the Italian Ministry of Education: "Programma di sviluppo Tecnologie Didattiche 1997-2000". The equipment has been totally renewed.

The computer lab, although reserved to a single class per hour, seems actually to cover the function of a meeting point. It is not uncommon that some children from other classrooms pop in every now and then, to ask an advise to Ortolani, or to ask if they can print, or to take an appointment. Other professors with a "free hour" may come in and usually discuss with Ortolani some planning of activity. The lab seems a sort of "free space", in which rules are not the same as in classrooms, in which one can freely move, or talk loudly.

Some sketches of activities

Without computers...

The fragmentation of activities, the frequency of periodic tests and examinations as well as the more rigid structure in general in the secondary school made it very difficult to arrange the observation of classes outside their permanence in the computer lab. Once, I had managed to get an agreement to assist to a regular French class, and that day... the teacher was ill. The following time, it was my turn to pay the tribute to the plague of winter flu. Another time, there was a previously unscheduled visit to a Museum. To make a long story short, the only time I could observe a "normal" activity, it happened in the computer lab and was by pure chance.

The test of maths

The class enters the computer lab noisily, while the teacher of mathematics unexpectedly announces that the first 20 minutes will be occupied by a test of mathematics. A large group of children rush to the back rows. They all sit down. In the last two rows, there is an abnormal concentration of girls. The teacher asks them to space themselves out better. "Go to the front rows, it is not group work!". The whole process of rearranging takes quite a long time. Finally, the teacher declares herself satisfied. "I love to come to the lab to have you do your tests. In your classroom, it is impossible to put you so far from one another" - she grins with a somewhat sadistic smile. Fabrizio, visibly proud, whispers to Ortolani: *"So, we will be able to exchange solutions with one another through e-mail!"*. Ortolani, who is always present in the lab while the other teachers come for their own activities, laughs very amused.

In the meantime five students from another class irrupt noisily into the lab. It is a common, uncensored habit. But the teacher of maths chases them out with a ""SHHT! SHHT!". This is very unusual indeed: in the lab, there is no obligation of silence whatsoever. Then, while the teacher of maths is distributing the test, another teacher comes in, talking loudly. . . "SHHT!". "Oh, I am sorry!", and she runs away.

Silence reigns, like in a church. Sudden memory of old school days. . . The children have started their test. Meanwhile, the teacher in charge of the lab works at the computer on something else. The teacher of maths walks around. Whenever she turns her back on someone, a funny effervescence starts: imperceptible movements of chairs approaching their neighbours, children whispering as if they had to transmit a military secret. . . The teacher comes up to me and asks me about my research. It is an extraordinary chance for the whole class to intensify their difficult attempts at exchanges. The child next to me looks paralysed by fear, turns almost imperceptibly his head towards Fabrizio, his neighbour, but he's sitting too far away. Another boy, Francesco Paolo D'O., THE outstanding student, looks at ease. He has finished his test well in advance and he's mumbling a dialogue to himself and to his sheet of paper. Then he stands up and goes to the teacher of maths to show what he has done. "It seems to me that it is very good!" - the teacher nods, almost in admiration. Following his example, another boy, Riccardo, goes to the teacher to show her his work, which is not finished yet. " I don't know, I don't know" - the teacher says to him rather annoyed, meaning "you have to do it alone!". Riccardo goes back to his seat, looking quite disappointed.

At the back of the classroom there are frantic exchanges of rulers. The teacher looks in that direction, and one of the children, with a guilty and frightened expression, waves a ruler, as a sign of innocence.

- "Doing a mathematical test on paper, having a computer in front of you and not being allowed to use it, it is pure sadism!" Ortolani jokes rather loudly. The teacher of mathematics ignores his comment.

"I give you only 5 more minutes"- the teacher threatens. "For me it is fine" - the outstanding student Francesco Paolo D'O. whispers to himself. Fabrizio has finished too. In the last row, when the teacher turns her back, one girl literally goes up to her neighbour and starts copying the solutions. The risk is high, but in the end, they become more intrepid!

Riccardo, the student disappointed by the teacher's answer, has finally decided to write an e-mail to a friend of his, instead of doing his test. The time is over. The teacher starts to collect the tests from the back. In the first row, a girl passes her solutions to her neighbour, a boy, who starts writing frantically on his sheet of paper. The teacher doesn't see, or maybe pretends not to see.

"Okay. Now, you can check at the computer whether you have done your test well", the teacher says. The children redistribute themselves in the classroom two by two, girl with girl and boy with boy, with very few exceptions. The noise level increases and reaches the usual standards for the lab. Children start working together, discussing, confronting their results. For this teacher, the computer obviously has the power to change the rules.

My impression is that the police-like attitude adopted by the teacher vs. her pupils during the traditional test is more a habit, perhaps a part of a consolidated ritual deemed to be suited to "traditional" activities, than a manifestation of a negative feeling. To lose this habit on her part, would require a pedagogical and organisational revolution. She has only undertaken this revolution half way. However, she proves she understands the value of collaborative learning and of self-assessment, as opposed to the centralised evaluation of individual abilities through "police-like" methods. That is why she encourages them to check their work at the computer immediately after and work in small sub-teams, autonomously decided by children. That is also why she exercises a form of intermittent control during the traditional test: I-see-you-are-cheating-and-I-threaten, I-see-you-are-cheating-and-I-pretend-not-to-see. It is as if the ritual of control through "terror" has lost some of its value, after all, but pushing the consequences of this consideration to its end would be too disruptive of the pre-established order.

... and with computers

Over a relatively short span of time (a couple of months), it is not very easy in a secondary school to plan the observation of the Lab activities by only one classroom. Children are very busy going to special theatre and cinema matinees, changing the schedule according to test and examinations, and then there is Carnival, the visit to a museum... I found myself following two more classrooms, a part from the third grade: the first and the second grade[6]. All these classes belonged to the same "section", the "D", and shared the same teachers.

The activities in the computer Lab, based on e-mail, are fully integrated in the school curriculum, although they are not assessed with grades. They started in 1992, in the framework of the Kidslink project[7].

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6 In Italy, the lower secondary school is made of three grades. Children are between 11 and 14 years old.
7 The outputs of these activities are accessible on the kidslik site (http://kidslink.bo.cnr.it).

Description of the activities involving the use of e-mail and Internet

- A Comenius project, involving one class, in collaboration with a Portuguese, a Dutch and two Greek classes. The project focuses on the following subject: "Our Country in the 20th century". Conceived as an interdisciplinary work, it entails research and production of texts in French, accompanied by illustrations, on themes such as environmental protection, health (AIDS and blood treatment), food habits and historical events. In particular, concerning this latter subject, the school is producing an hypertext on the First World War, which will be accessible through Internet.

- Fahrenheit, consisting in the setting up of a data base of critical résumés of books, written autonomously by the pupils and students of the whole Kidslink network. Hundreds of critical resumes are available on a large number of books.

- "Lipogrammi", a linguistic exercise consisting in re-writing a short text without using a certain consonant, that is using word synonyms. The original text is launched by the temporarily leading school through the Kidslink network, while the other schools take part in the contest producing short texts (either individuals or groups of two children). The leading school has to declare the winner among all participants. The results of the contest are then circulated through the network (in the "Guido Reni" school, they are hung on the wall of the computer Lab).

- "Esercizi di stile", a linguistic exercise consisting in re-writing a text sent by the school which temporarily leading to all the schools of the Kidslink network. The project was spontaneously born from the idea of a school and became quite successful in terms of participation. Children are asked to produce a new text, choosing one among the several styles that are proposed (such as ironic, dramatic, rap, juridical, poetic, graphical, sport-like, journalistic, cinema-like etc. etc.). As in the former case of Lipogrammi, the temporarily leading school declares the winner among all the participating texts and the classification is then made public on the network.

- Participation in the Classe Globale Francophone, entailing a spontaneous participation to the thematic conferences that are periodically launched on the CGF network.

Producing a text with images for a COMENIUS project

First day of observation at the "Guido Reni". I am in the Lab, waiting for the 3D to come with the teacher of French, to conclude the first phase of their Comenius project (see box above for description). Here they are, entering in a rush and taking their seats very surely, as if they knew exactly where to go and what to do. There are only 13 people present, approximately half of the class. It is what this final phase of work requires. The other classmates have stayed in classroom, with the special support teacher and the two physically impaired children.

Only one mixed small group sits in front of the screen: all the other children work with someone of the same gender. A soft murmur fills the air; children are deeply concentrated on their screens. The teacher of French and Ortolani walk among the tables, stopping here and there to answer the questions that the children address them.

The tasks assigned are very different. At the most powerful computer sits Fabrizio, editing the images with the text. He is very skilled at computers and he is working alone, with no help neither from Ortolani, nor from his French teacher. At the far right of the classroom, a girl is colouring an image at the computer. Others are polishing pieces of text, or simply dictating to their neighbour. The texts are in French: they have been first written in Italian by the children, then translated into French by them and finally corrected by the teacher. "This is a problem" — the teacher later will tell me. "The subjects are so technical *(environment, AIDS, food traditions....)* that for the children it is extremely difficult to express themselves correctly. They have to concentrate on the terminology, on the grammar, on the syntax... That is the problem with this type of projects, concerning the practice of a foreign language... It is already difficult enough to produce interesting material in one's own language. So, I am obliged to intervene heavily on the final elaboration of texts... something on the Internet has to have a certain accuracy!".

The two children continue typing their text. The one who dictates is actually reading French as if it was Italian, pronouncing all the vowels and skipping the diphthongs: it is rather hilarious.

A boy who has just finished his task, spontaneously goes up to Fabrizio and asks him if he can work with him at the layout. "Of course!" — Fabrizio says, and they start discussing possible graphical solutions.

The teacher of French is complaining, half jokingly with Ortolani, that yesterday she has lost a mail. Mysteriously, of course! In the last row, a trio of two girls and one boy (Francesco Paolo d'O., the outstanding student) is having a little dispute. The boy exclaims: "Basta! We must now work seriously!". One of the two girls looks annoyed and turn her head away from the screen. The other teases him. "If you two continue like that, I am going to work alone!" — he utters. The tension grows and Francesco Paolo d'O. distinctively exclaims: "We are forcing the whole class to waste time!". The teachers do not intervene, the dispute increases in volume and slowly dies down. The boy takes the lead in the operation and the other two girls stay at his side, sometimes overtly teasing him, but not too obstructive vs. the work.

The teacher of French sits down next to Fabrizio and the other boy. They start discussing the lay out and final editing of the work. I approach them. Fabrizio asks the teacher how she would like to have certain images in the text. The teacher tells him her opinion consulting him on the feasibility and asking him for advise, and then he tells her knowingly what technical solutions he can implement. "When Giuliano (Ortolani) is not around, I need 'my technical expert'. So I look for him in the classrooms." — the teacher says. Then, smiling, she adds: "Fabrizio is our favourite technical expert!". Fabrizio returns the smile, half embarrassed: "Oh, but it is not so difficult what I do", and very modestly he resumes his work. The teacher continues: "Once I asked Fabrizio to listen at my place to Ortolani's explanation on how to make a cut and paste of a lot of text pieces and images. I was afraid that I would not be very quick to grasp it and then put it into practice" — she laughs. "So Fabrizio listened very attentively to Ortolani. Of course, he grasped everything immediately but when I asked him; 'So, Fabrizio, now you know everything?', he answered: 'No, no, no, no. Now, Prof.[8], it is your turn to try!'". The teacher laughs: "You see, he even has a proper pedagogical approach!".

The dispute continues in the last row, but one of the two girls is visibly indifferent, looking around rather bored. The girl who was colouring the drawing has finished her work. To keep herself busy she starts doing some gym exercises in a corner. "Ehi, you, beauty! Did you save your work on a diskette and give it to your classmates?" — Ortolani jokes with her. In the first row, a newly formed pair (a boy and a girl) are having an animated discussion

8 "Prof" is the colloquial way with which Italian pupils designate their teachers.

concerning the possession of the mouse. The girl seems to prevail. Holding the mouse, she says with a proud grin: "No, you do nothing!". The bell rings: the teacher of French has to go to another classroom. The children, who would be supposed to leave the lab and return to their classroom, obtains the permission from the teacher who should have the next hour with them, to stay in the Lab to finish their work. The lab is available because the class that was supposed to take over is actually at the museum with the teachers of history and artistic education.

All of a sudden, a cry from a small group of children: "A virus, there is virus in Mariangela's diskette!". All the class rushes to the group, very excited. "A virus, a virus!". "Of course, it is from Mariangela!". "Let's kill the virus". Ortolani looks quite amused at the belligerent attitude of the children, and, unlike the children, worried about the virus. The virus will occupy the next hour in the Lab. The end of the work is postponed to the following week.

Style exercises in the Lab

The class of Italian for the 3D today takes place in the lab. As the teacher of Italian announces, she is going to "take care of the Italian part, while Ortolani is going to take care of the computer part". The children have to write a text in a special style to be chosen among a given selection, starting from a text which has arrived via the Kidslink network. The school which has originated the text sends it to all the schools of the network, along with a list of possible styles. The children are asked to re-elaborate it, individually or in pairs, and send it back to the school which started the exercise. That school then declares the winning text and the result is published through the networks. It is a real contest, with a prize in the end (usually a book), but felt especially rewarding by the children, in terms of "pride and honour".

The teacher starts reading the text. She then announces the list with the styles among which the children have to choose: poetic, sport chronicle-like, thriller, juridical, geographic (with maps etc.), historic, telegram-like, dialogue-like, oratory, rap... They have to write directly "in Winword". "Save as often as you can!" — she warmly recommends, probably feeling herself very unconfident with the intangibility of computers. The excitement grows. The teacher turns to me and says: "It is a very difficult exercise indeed. I am very happy I do not have to do it myself!".

The atmosphere is very playful. The children work in pair, with very few exceptions, boy with boy and girl with girl. They are all very concentrated on their work. Every once in a while, a pair goes to another pair and proudly show its production. The teacher walks from pair to pair and stops for discussing the choice of style. Sometimes, she gives suggestions as to what a particular style could resemble. When she finds a pair of girl who is working at the geographic style, she tells them they will not have to do other homework for Italian, "because what they have chosen is very difficult".

Time, once more, goes by quickly. Only 20 minutes are left and children are not even half the way in their efforts. They will have to continue another time, the teacher announces. She approaches a group of three who has chosen the dialogue-like style. She slightly bends behind their shoulders to read their text and then suggests them to choose an easier one. Ortolani, in the meantime theatrically shouts several times: "Save often! Save often!". A pair of girls, very bourgeois/reassuring look, has chosen the rap style. Ortolani slides behind them to read what they are writing. "That's beautiful!" — he exclaims.

The teacher of Italian comes to me and starts to chat, as if she felt the need to share with someone her perplexity. She feels somehow puzzled and slightly uncomfortable with the multiplication of the focuses of attention and the weakening of the traditional vertical structure in the class. "We Italians are always too sensitive to fashion and trends." — she says. "This is why we massively adopted these technologies. In the other Countries, instead, people are more pragmatic, more organised, more structured...". Nevertheless, I have the impression that she somehow enjoys to see the children's enthusiasm and, in the end, she prefers not to exercise her privileges (she is not obliged to adhere to the Kidslink activities, after all) and takes part in the new adventure.

In the meantime, the teacher of French, who has a free hour, enters the Lab and starts working with Riccardo at the integration of images and text for the Comenius project. Another teacher enters and starts discussing with Ortolani, without minimally interfering with the on-going activity. None of the children pays any attention to the "intruders".

Time is running short. The teacher of Italian, becoming more visibly anxious about her children not being able to finish today, tries to encourage them to hurry up. Finally, she decides to go to the teacher who should occupy the Lab with another class in the following hour, to ask if she can let the 3D there a bit longer, so that the children can finish their exercise.

In a corner, the two girls who had chosen the geographic style, have abandoned the computer in the meantime and are continuing their work by hand, with pencil, eraser and ruler. The bourgeois-rap girls, who have just finished their rap text, are copying it on their notebook by hand from the screen, instead of printing it. "Yuhuuu!" — Ortolani remarks to them, while pointing with an ironic finger the printer... The two girls burst out in laughter: "Oh, we are so stupid!".

The bell rings. The Italian teacher tries to organise the follow-up: all those who have finished should quickly print their text and, in line two by two, go down to their classroom. Those who have not finished yet can stay in the lab: "One per group, it will be enough! The others, quickly in line: we go back to classroom!".

Lipogrammi with the class 1D

The teacher of Italian is distributing the printed text with the lipogrammi[9] to the children of the 1D (eleven years), so that they can correct them at the screen and send them to the school which started the exercise. Instead of giving back each text to its respective author, the teacher gives it back to a classmate , "so s/he can better see the mistakes". Ortolani had to go out and the teacher, who in not at all confident with computers, looks a bit worried and seeks to reassure the children and herself. "If there are any problems, we'll ask for help to 'our technical expert' Secchi" — she say to the class. Secchi is a pupil, who apparently has a certain experience with computers. And, in fact, he is right now advising a girl on how to get the "@" on the screen.

A little girl goes up to the teacher to tell her that she and her friend cannot manage to get the "@". The teacher, a bit uneasy tells her that "sometimes, certain computers do not answer to commands". Secchi rushes then to rescue the little girl, while the teacher asks, while looking around: "but, where is Ortolani?". Secchi solves the problem, and the "@" appears on the screen of the little girl.

The teacher goes from group to group, helping the children with their texts with a very maternal attitude. She stops for a while at a group of three in the back. A procession starts towards her of children in need for help. "Go back to your place" — she firmly urges them. "Now I am working here!".

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9 See the box above for the description of the activity.

A trio of girls is working in collaboration on a text. Hanne is one of the three girls. She is a Danish girl, who has arrived in Italy only three months earlier, at the beginning of the school year. She still does not speak any Italian and understands only a little. She looks very shy, and somehow far away. She is in charge of typing the text. Her two classmates help her when she makes mistakes. They are very kind, attentive and protective towards her.

Ortolani finally reappears and starts discussing with me on the bureaucratic difficulties of getting rid of the machines which are not working anymore (the Ministry obliges them to keep them). He is suddenly invested by a series of requests: "How do we get the printer to work?"; "I lost everything! What can I do?". A dozen of children are besieging him. "Tell me" — he enquires jokingly towards me, "should I help them all?". He is very quick in putting them on the track to find the solution by themselves. But now, he has to go away again. The teacher of Italian looks desperate again. A girl comes up to her with a request for help. The teacher looks distressed: "But where is Ortolani?"... "Where is Ortolani?"... "WHERE is Ortolani?"... "Go and track him" — the teacher finally imperatively urges to the little girl.

The trio with Hanne has finished to correct the text and starts working at "Esercizi di stile". The teacher goes up to them and reads the text that Hanne has written at home, by hand. The text is in English. The teacher asks her first in Italian, and then translating in a very basic and "home-made" English, whether she has done it alone. "My father helped me" — Hanne says. In fact, she has just translated the basic text as it was, from Italian into English. "The text is in English" — the teacher says to the class. "Smeraldi, who is good in English can dictate it to Hanne while she types it". Two children actually rush up to Hanne to help her. They dictate in English with a very strong Italian accent and Hanne has some troubles to understand.

Requests are starting to arrive for help on how to send the texts via e-mail. The teacher inexorably declines and says: "If you need help for sending, you should look for Ortolani!". "But where is Ortolani?". "Where is Ortolani?". "Where is he?".

In the meantime, the catastrophe. A few children have lost everything. Others do not remember how to save. Others cannot find anymore what they saved (drive A:?, drive B:?, drive C:?, drive E:?). "WHERE is Ortolani?".

The recess bell rings. Ortolani has not yet reappeared. Some children from other classes enter the Lab to check the listing of the results from the former "Lipogrammi" contest, that are hanging on the wall. One of them comes up to me and asks me: "Do you know where is Ortolani?".

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What children think on computers (and how a teacher is trying to influence them)[10]

The interview to the class was not originally scheduled. After having finished my interview to Mrs. Conti, the teacher of Italian, in front of the whole 1°D, she proposed that I asked the children their opinions concerning computers in school. At the moment of the interview, she had been knowing these children, who are in their first year of Lower Secondary School, for about four months.

I = Interviewer; LC = Mrs. Conti.

I: Would you like to say something?

(A little girl stands up): We wish to thank you, Madam, for having allowed us to skip the grammar lesson!

LC: This is not a constructive remark. Would you like to express your opinions on computer, on the use of computer in school? If any of you has something intelligible to say... Would you like to say something, Paolo? Come here!

(Then, turning to me) Paolo for instance, very often "hides" behind the computer to give in homework written in a legible way... *(Turning to Paolo)* So tell us...

P: Well, computer in school? I mean, computer in school is an alternative activity, that we do, and which is also cute, because it helps us. We do mathematical calculations and it also gives us its (*his?*) opinion and it helps us to do... I don't know, we can make drawings which we then print and look at...

LC: But, do you like it?

P: I do. It is amusing.

LC: It is amusing *(perplexed)*... Are you happy to have it there?

P: Sure. Also as...

LC: But would you like to have computer also in front of you... instead of me?

P: No, maybe it is better to have you in front of me, because the computer is a machine.

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10 Interview to the 1 D class (11 years old).

LC: But, think seriously, think about this hypothesis...

P: Well, computer is still a machine, one cannot confuse it with a teacher!

LC: And the fact that you could establish your pace and your path, you know, a teacher who is neutral, for instance, because he never gets angry at you... You are the main actor in that process...

P: But teacher must also be severe and get angry, because otherwise, we cannot learn anything.

LC: Good, good boy...

I: You have just gained your promotion!

(laughs)

LC: Is there anybody who would like to express his opinion?... *(Addressing to the little girl who thanked me for having let them skip the grammar lesson)* You, "long tongue"[11], come here!

"lt": It is interesting.

LC: Why? Tell us why. You know that a statement without motivation is not enough for me.

"lt": Uhm! ... Because...

LC: Interesting, you say? To me, it is not interesting at all...

"lt": No, But I don't know... Say, when we go to the "Prof" of mathematics: we go once a week and then... she, well, she brings us a geometrical problem and we have to represent it on the computer, then we have to save it... and then that does me... eh, printing it... Well, I have a computer at home, but it is old, that is, it is not that...

LC: What does it do to you? Try to finish your sentences, do you like it or not?

"lt": Yes, yes, I like it...

LC: But even if it were not there, you would not feel deprived, would you?

"lt": No.

LC: Is there anybody else with another opinion... Would you like to say something?... Would you like to say it, Filippo?

F: That it is difficult, yes, but also enchanting.

LC: Why? always say why...

F: Because... it is you who command it.

LC: You command the machine...

I: Do you feel the need to control it?

F: ....

LC: So, you like to command this tool, this process you do... Yes, Michele?

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11 "Lingua lunga", a colloquial expression meaning somebody who talks a lot.

M: When you said to chose between the teacher and the computer, I would chose the teacher, because the computer is the most stupid machine on earth. And therefore...

LC: *(Turning to me)* He is becoming giant to my eyes!... However...

M: But I can also have the same opinion as Paolo, yes. I like to work on computer, it is amusing...

LC: It is an alternative, let's say.

M: Yes, yes...

LC: But it is not a world you already fully master. Maybe we should consider that we still have a limited use of it, because certainly...

... Beretta, come here!

B: When we have finished the work, if we manage to finish it before the end of the hour, we are a bit proud...

I: To see a finished product?

B: Yes, we do not always manage to finish it but usually we do... maybe we do not manage to print...

I: Why are you proud?

B: Well, because it is a different thing, let's say, from what we usually do. Usually we write on... well, you know... the printer... I... I like the printer.

LC: The use of the printer.

B: The printer...

I: What do you like?

B: I like, no, I like, well, seeing the drawing that we made reproduced on the printer sheet.

LC: And it came out well... And it is also clean.

B: Eh, yes.

LC: The graphic look is important...

B: And then I am proud if someone looks at my "computer science" exercise book. I mean, if I did it well and somebody looks at the computer science exercise book, I am proud, because the computer, I think, makes, let's say, good drawings.

LC: Okay. So, someone else? Would you like to say something? I mean, say it really... We are doing an analysis of your school activities. That fits very well in our programme. So, nobody else?... Cavicchioni! Come! Quick, my little one!

(whispering to me): They are still very young, they need a "vice-mamma"... So, Cavicchioni, what?

C: I, I... I think I am one who does not like computer science very much. No, because... not to please the Prof....

LC: Nooo, I believe it...

(laughs)

C: I, in computer, also because I am not used to it, I do not have it at home...

LC: It is a new tool...

C: Yes, and then I do not understand anything about it.

I: You feel you cannot control it?

LC: Maybe other schoolmates are used to it, since they have it at home. It is possible that you, next year, for instance, will feel at ease, because you will be familiar with the tool. But now, you still do not feel at ease in front of the computer...

C: Yes, I do not know how to use it well...

LC: Eh, in fact it puts you in a state of impotence, doesn't it? I feel the same thing as you. Filippo says he can dominate the machine. I still feel very limited and I am almost dominated.

(*from somewhere in the classroom*): But one can find out new things...

LC: (*Ignoring the remark*) Eh, so, you are still fearful, you are still not under its charm... Is that it?... Is there anybody who would like to say something?... Ah, come here.

?: I think, that when one then learns how to use it, it is very beautiful, because you feel you are, as Paolo was saying, I do not remember, you feel you can do all you want with that machine, you are sure it does not make mistakes, so, and then you can do what you want, I don't know...

LC: Do you feel a little more "adult" in front of that machine?

?: Ah yes, because usually...

LC: (Turning to me) Because this is also an important factor...

?: Even if you give it (*her?*) small orders, it (*she?*) always does it ... If you give it (*her?*) a right order, it (*she?*) does it right, and it (*she?*) doesn't complain (*laughs*)

(from somewhere in the classroom): It is not like older brothers...

?: Now that we are still little, and it is parents who tell us things, giving orders to a computer...

LC: It gives you a sense of power ...

?: Ah, yes.

I: Do you feel it is one of the few things you can command?

?: Yes

LC: You like it...

?: Also because of this. And then because, as Paolo was saying, in the end, after I have all the work well done, even if I have made mistakes, and it has taken me a long time, well, I am happy I made it.

LC: But, I mean, if we produce a text on computer, and one on the exercise book, what difference does it make to you?

?: Well, the difference it makes, I mean, I think it is enormous because, on the exercise book, it is a normal text that anybody can write, but, instead, when it is written on computer, it is, yes, the same text, but it has something more.

LC: Something more "adult"?

?: Yes, you feel that you have made a cleaner work...

LC: Here it is, the editorial look is very important...

?: It is like you could show it also to the President of the Republic!

LC: Okay, I understand. So, you like order very much?... And you Hanne? Do you like computer (*LC says this last sentence in English, with a very strong Italian accent)*?

I: It's OK, I understand English, no problem.

LC: Come here, come on. (*Whispering to me*): Hanne is Danish, she arrived three months ago and she still does not speak Italian...

(from somewhere in the classroom): Come on, Hanne!

LC: Do you like computer (*in English*)? Come here. (*To me*): She is very shy. (*To Hanne, who does not move*): Well then we will come to you (*in Italian*)... Do you like using computer (*in English*)?

H: Si.

LC: Si? Speak English, if you want.

H: Yes.

LC: Becau... Why (*in English*)?

H: Because it's.... mhhh....

LC: What do you like (*in English*)?

H: It's more beautiful.

LC: Beautiful, your writing (*in English*)?

H: ...

LC: The piece of paper? The way it is written is nicer (*in Italian*)?

H: No

LC: Writing, then. You like the writing itself? Do you prefer to use it for mathematics or for Italian (*in Italian*)?

H: Matematica.

LC: Matematica! (*Looking satisfied*)

I: Maybe also because she has some difficulties in Italian...

LC: Sure... So is that it?

I: (*Pointing at a boy*) He would like to say something else.

LC: Paolo, come here... This lady, now I explain it to you, is a researcher from the University of Liège.

P: Congratulations!

LC: She is doing a research and she would like to have your opinion on the use of computers in school.

(*from somewhere in the classroom*): But we have already seen her, haven't we?

I: Yes, I was once in the lab while you were there.

P: I would like to add that the computer is programmed by a man, therefore, even if it has been programmed in a particular way, it cannot do more things than another person, I mean, I do not agree with Sara. I think that texts always come out the same way...

LC: But you often bring me texts written on computer because they are nicer and neater...

P: They are neater, but it depends: if one has the ability to command the pen in a regular way... he can do the same. I mean, I do not write very well by hand, my hand writing is rather ugly. I can prepare a text on computer and...

I: But you feel that it is too impersonal, you feel that texts written on computer lack imagination... Maybe they are too regular, in the end?

P: You can also add pictures... Yes, it is a little regular, because you could do what you want with a pen... In fact, computer drawing has been based on pen, on pencil.

LC: I would like to hear Marianna. Marianna, come here. *(Whispering to me)*: She is a very silent girl. But she is a very good student... Marianna, What do you think? You certainly have your own opinion on the subject.

M: Well, I like computer, because certainly the texts written on computer are neater than those written by hand. Even if my hand writing is nice.

LC: Do you have a computer at home?

M: No

LC: Did you learn to use it here in school, then?

M: Yes.

LC: And mathematics? Do you like to do the exercises on computer?

M: Yes

LC: Yes? Do you find it more valuable?

M: Yes

LC: OK. Would you like to add something?

M: I prefer to use computer for mathematics than for Italian, because one can do more things.

LC: Let's hear also Gaia on this matter, she will tell us her opinion... What do you think, Gaia?

G: I like computer.

LC: Why?

G: You can do many things, you can find out...

LC: What do you mean by "find out"?

G: In the sense, find out... computer can also give you information.

I: Do you have one at home?

G: Yes

I: Also Internet?

G: No, no.

I: But, what do find out on computer?

G: Well, ...

LC: You mean, its mechanism?

G: Yes, the way it works...

LC: Its procedures, that is what interest you?

G: Yes

LC: And then, you who are always looking for precision, you like to have the page printed at computer?

G: Yes

LC: Do you feel more confident, or less?

G: Yes, more confident

LC: OK, it is fine...

(the little girl who thanked me for having let them skip the grammar lesson): May I say the last thing?

LC: Come here! (*To me*): She is like that all the time. How could a computer ever substitute me?

(the little girl):: I think... The only thing... I can not use computer very well. I know how to use it little, very little. But instead Paolo can use it very well: it is since the beginning of the year that he gets along with the computer very well. And so, maybe, when I do not succeed in doing things or when I do not manage to understand how to finish my work, and maybe I see Paolo with his work already done and printed, maybe, I do not know, I am a little jealous, I mean, I am. It is not that I would like to be Paolo, I would like to be able to command it better. I mean, it is not that I like computer very much. I would like to be able to use it as Paolo can use it...

LC: You will learn, with the character you have, you will certainly learn... So, if nobody else has contributions to give, we...

(*from somewhere in the classroom*): We wish to thank her because we made us lose this hour!
LC: It was not a lost hour, because it has been a moment for reflection. You children, you should always reflect. On the contrary, you have been even more controlled than usual, that is, it went very well.

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Some considerations on TIME and SPACE

When children are in the computer lab, time seems no more a unique, linear flow dictated by the voice and rhythm imparted to the lessons by the teacher. Time is fragmented, extended, compressed in the different niches of the classroom. It is full and quick for the two children writing at the computer; hollow and slow for those waiting for some new instruction or for the teacher to help them. Perceptions of time differ strongly between those who are working and those who are not. There are many more "hollow times" than during a traditional lesson.

The management of time becomes less and less a police issue and more and more a challenge to the teacher's and the children's creativity.

Classical hours (55 minutes) have become definitely too short. The fragmentation of subjects , coupled with the fragmentation of time poses more and more problems to the activities developed in the Lab. *"While I am going down the stairs at the end of the third hour, accompanied by Ortolani, the teacher of Italian is coming up to tell him that she absolutely needs the print of the works of those 3 or 4, who did not have the time to do it in the previous hour, so that they can continue to work in the classroom. Obviously, the lab is now taken by the teacher of mathematics with another class, and so they must wait at least another hour"*. I often observed the children interrupted by the bell ring just when they were at the climax of their concentration and their activity.

The activities themselves are often interdisciplinary: the fragmentation of knowledge, organised through the fragmentation of teachers' responsibility, and consequently of the time allocated to each of them, seem totally inappropriate.

In the Lab, the space is occupied by children and teachers differently from traditional classes.

The inviolability of territories is radically questioned: the teacher seems to be no more the only "Lord" in his/her kingdom. When the lesson takes place in the Lab, the territory is shared with the "technological operator", from whom the other teacher totally depend concerning the operational aspects of technology. The lab is an open territory: anyone can come in without knocking at the door, anyone can talk loudly, no one is sanctioned because he/she leaves the assigned territory of his/her seat, to visit that of a schoolmate. Other teachers may interfere, trespass what were once the sacred the borders of the others' dominion and "state new laws". This is more true when an interdisciplinary approach is adopted in the development of learning activities.

The vertical power structure is radically questioned: there is a decentralisation and a multiplication of micro power structures, having different spatial and temporal configurations.

The changing relationship

What to me seemed the most interesting phenomenon I observed was a certain change in the relationships between the different actors in the school, and especially between teachers and pupils.

Using ICT can be an element that disrupts the traditional relationships between teachers and pupils. In some cases, this was experienced with dismay by the teacher, who did not feel confident enough to question his/her role: dismay in front of the (perceived) loss of control. The teacher in question tried to defend herself by invoking her protective role vs. pupils.

Another teacher, on the contrary, found this inversion of roles (the child taking the lead in teaching both the teacher and his classmates) rather stimulating and comfortable. As she said in an interview, she found it extremely motivating for her and for the children to let the pupils take the lead in some matters, because she believed that it helped create a climate of mutual confidence, very beneficial for the harmonious development of the little class community and for the children's self-reliance. She had no problem recognising the children's competence and her incompetence, notably in manipulating the computer, and could fully accept to hinder her supposed monopoly of "knowledge dispenser". I saw her asking help from Fabrizio several time, with great modesty. And I saw little Fabrizio almost "mothering" her, patiently explaining her the process and asking her to repeat it alone to check whether she had learned...