

Seminario di aggiornamento

“ESP & CLIL: friends, false friends or foes?”

18 October 2017 Bergamo

Workshop: SOCIAL AND ETHICAL PROBLEMS OF ICT

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This workshop will show how a traditional lesson starting from the textbook can be transformed into a project-work with a large use of ICT skills and collaborative work in order to create a final multimedia project to be shared on the Net.

The topic analysed is “Social and ethical problems of IT” and it represents a first step to develop digital literacy at school-



Step 1: Motivate

Before starting the project a warming-up activity is needed in order to motivate the students and elicit their curiosity. The textbook suggests a 5-minute video from YouTube which represents authentic material. The channel used is “The School of life” and it is addressed to general users, not only students. Students have to deal with the real life language. Probably they won’t understand the whole message but, with the help of images and animation, they can understand the gist. Being simply a warming up activity, whose aim is to elicit the students’ curiosity, the time dedicated to this activity will be short, just a few minutes, just the time to take notes. If necessary, the video may be played twice.

Step 2: Team formation

Collaborative work is one of the fundamental competences of the 21st century skills. In a CLIL activity the teacher should act as a facilitator, supervising the activity, while the students become the real protagonists of the learning process.



Collaborative work includes the development of several competences: brainstorming, interaction, sharing ideas, discussion and it helps the creation of a sense of community.

The textbook, **Working with New Technology** by K. O'Malley, Pearson 2017, pp 214/5 presents 6 different topics that the students are invited to choose:

UNIT 14
COMPUTER NETWORKS
AND THE INTERNET

CULTURE

Social and ethical problems of IT



The rapid evolution of computer and mobile phone technology, together with the expansion of the Internet, is having an enormous impact on the way we live and has raised many questions about how our world is changing. The following are some of the social and ethical issues to emerge.

The digital divide

There is a split in society between those people who are technology-literate, and therefore have the tools to prosper in the modern world, and those who lack these skills. This is partly an economic division, because technology can be expensive, but it is also affected by other factors such as age and level of education. Older, poorer, less educated people feel increasingly left behind.

Interpersonal relations

New methods of communication have changed how people relate to one another in all sorts of ways, from business meetings to friendships and even romance. Social media networks have become an essential method of keeping in touch for millions of people. However, paradoxically, despite this expansion of communication, there are fears that we are losing more direct human contact with others

and becoming more isolated, hidden away alone in our homes staring at screens. The impersonality and anonymity of online communications can also lead to a loss of **empathy** with other people and an increase in phenomena like online bullying and Internet **trolling**.

Information overload

The ease with which data can be published online means that there is an enormous, and constantly growing, mass of information now available on the Internet. This is difficult to deal with, even with the help of super-efficient search engines. How can we know what information is reliable and what is **misleading** or even false? In workplaces the effort of trying to keep ourselves constantly updated, and responding to the never-ending flow of e-mail, can cause stress and **obstruct** genuinely productive work. While mobile technology may sometimes be convenient, allowing us to do things at home or even on holiday, workers can find themselves in a position where they are on call 24 hours a day.


Censorship

Some people want to keep the Internet as a place where anybody is free to publish anything. In their view society makes progress through the free exchange of ideas and the Internet is the ideal forum for completely open debate. Others fear that allowing open access to controversial,

subversive or (in their view) immoral opinions or materials may have a damaging effect on society, and especially on more vulnerable people such as children. Should racist, violent or pornographic materials be freely available? Who should decide what is acceptable and what is not? How can websites, which may be located abroad, be controlled?

Surveillance

Cellphones and computers leave digital records behind them of exactly when, how and where they are used. The smartphone we carry around in our pocket is the most sophisticated **tracking** device ever invented. Governments and businesses (and even criminal organisations) now have potential access to enormous quantities of information about every one of us. Should companies be permitted to build up detailed profiles of people for commercial purposes? Should security services be able to demand to see the contents of our e-mails or listen to our phone calls as part of the fight against crime and terrorism? What rights to privacy and civil liberties should a citizen have? (See also p. 248, 'The surveillance society - security or control?')




Unemployment

Developments in technology are leading to the disappearance of many jobs. Robots and automation have eroded manual production work in factories and a similar process is happening in service industries

too with, for example, shop assistants and bank clerks being replaced by automated systems. Now higher level managerial and professional jobs are also under threat due to advances in software and artificial intelligence. New technology has always led to new professions taking over from **obsolete** ones but there is a widespread sense that the current elimination of work goes much farther than ever before. What jobs will there be for young people in the future when self-improving self-generating robots can do everything? (See also p. 247, 'Will technology make humans redundant?')

Erosion of cultural industries

Digital technology can make perfect copies and then distribute them, in infinite numbers, over the Internet at almost no cost. This revolutionary capacity is having a devastating effect on traditional mass media. The music and film industries suffered first with steep declines in sales of CDs and DVDs. Now newspaper, magazine and book publishers are also being undermined by the easy availability of free material online. People have grown used to obtaining all sorts of material from the Internet without paying and so downloading **pirated** copies of songs or films does not really feel like stealing. The problem is that, without income from sales, how are creative talents - musicians, writers, actors etc. - going to survive? (See also p. 228, 'The web and the mass media')



34 Read the text and write the words in blue next to their correct definitions.

1 Duplicated without legal right or permission:	
2 Following the trail of someone or something:	
3 Intended to confuse people or give them a false idea of something:	
4 Intended to damage or destroy an established system:	
5 Make it more difficult for somebody to do something:	
6 Making deliberately hurtful remarks to people online:	
7 No longer in use and replaced by something newer:	
8 The ability to identify with and understand another person's feelings:	

KEY COMPETENCES: CIVIC LITERACY

35 EXAM PRACTICE Using your own words, explain why developments around new technology could...

- 1 create more divisions in society.
- 2 make people feel more cut off from those around them.
- 3 make the exchange of opinions more aggressive and hostile.
- 4 make the spread of misinformation easier.
- 5 increase pressure on people at work.
- 6 have a damaging influence on people, especially the young.
- 7 make it easier for governments to control people.
- 8 be a threat to the jobs of many people.
- 9 be a threat to traditional methods of mass communication.
- 10 endanger artistic creation.

36 Listen to some news reports concerning technology and answer the questions.

- 1 How many active users of Facebook are there around the world?
- 2 How many people go onto Facebook every day?
- 3 What name is given to Internet censorship in China?
- 4 Which five big social media sites are blocked in China?
- 5 What proportion of British teenagers were subjected to online hate last year?
- 6 What proportion were witnesses of online hate incidents?
- 7 What percentage of Italians never use the Internet?
- 8 What is RAI doing to improve this situation?

WATCH THE VIDEO AND LEARN MORE

YouTube ▶ 'The dangers of the Internet. (The School of Life)' (first 5 minutes)

Which four social dangers does this video focus on? What statistics are used to justify the argument?

The teacher invites the students to form groups of four and to choose among the following topics: *The digital divide/ Interpersonal relations/ Information overload/ Censorship/ Surveillance/Digital Unemployment/ Erosion of cultural industries.*

In order to save time, the teacher should prepare a document to be visualised on the LIM with the list of names of the students and the list of the topics for the groups. With a simple drag and drop action, groups are shown on the LIM.

Step 3: Explore

The teacher clearly communicates the task of each group: **create a multimedia product presenting the content of the topic assigned.** Students are invited to dig deeper into the topic searching on the Net statistics and examples, images and graphical elements that make the presentation more effective. Students are free to use the digital tool they prefer.

Exploring the Net, students develop their skills of understanding, analysis and evaluation. Creativity is at the top of the new taxonomy proposed by Lorin Anderson and a team of cognitive psychologists in the mid 1990s, who updated Bloom's taxonomy by adding *Creating* on the top.



Step 4: Collaborate and Create

Each group is free to use the digital tool they prefer : PPT, Prezi, Adobe Spark, Emaze, GoAnimate etc.. which, later are published on dedicated PADLET dashboard.

Most of these tools allow a shared activity, so the school activity dedicated to the collaborative work is limited to 2 or 3 hours, while the rest of the work is done at home. Of course this is possible if they students have the devices and the connection at home and if they are already used to sharing their work.

Collaborative work means, also, being able to create a general plan and to divide the task. Each task is related to the other so to form a coherent presentation. Students are free to take decision about what to say and how to say it. So students make decisions and take up responsibility for themselves and for the group, as their tasks are interconnected and interdependent.

The role of the teacher is to supervise the general draft while the students are working in groups. The teacher can also visualize the work in progress if the file is shared on Google Drive or other tools allowing the sharing in order to create a sort of scaffolding for their work in progress.



Step 5: Communicate



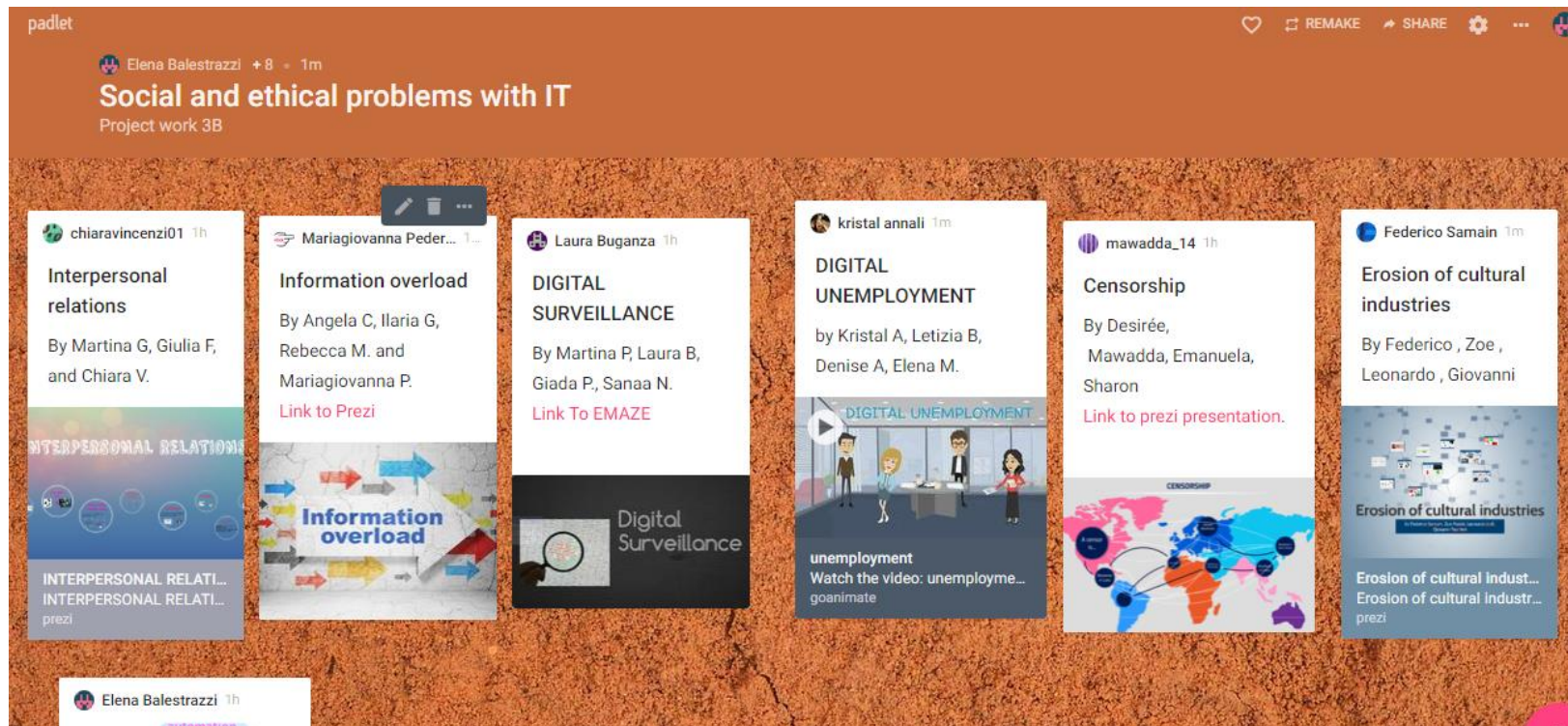
When the multimedia product is finished, students in groups present it to the rest of the class. A rubric is provided, in advance, to the students where the criteria of the performance include not only content and language but also communication skills. The teacher will assess their communicative skills taking into consideration their creativity, the graphical display, body language and impact on the audience. The rubric is delivered to students before their performance so that they are informed about

what is going to be assessed.

Communication skills are tested in a real context as there is an information gap between the speaker and the rest of the class.

The work is collected in a common dashboard on Padlet, so that single projects may be accessed by the students at home and are at their disposal anytime.

RUBRIC for the multimedia presentation		Clear purpose and pertinent examples, facts and statistics; supports conclusions or ideas with evidence. Sources are mentioned.
Content/Org	insufficient support for ideas or conclusions. Sources are not mentioned	not adequately support the subject; includes very thin data or evidence. Sources are sometimes mentioned
Language	Uses inappropriate sentence structures, pronunciation and/or lexis making it difficult to support the topic	Uses sentence structures, pronunciation and/or lexis that is mostly appropriate in supporting the topic
Creativity and graphic design (Storyline, images, graphical elements, special effects)	The graphic design includes images and graphs that are not appropriate, don't support the storyline. The audience finds difficult to understand the ideas presented. Use of very simple ICT tools	The graphic design includes images and graphs that are appropriate for the understanding of concepts. Use of simple ICT tools
Delivery of the speech and impact on the audience	Demonstrates poor enthusiasm about the topic. Poor eye contact, inappropriate voice volume, tone and pacing. Inappropriate gesture and movement that support the presentation. Fails to increase audience understanding of knowledge of the topic	Demonstrates strong enthusiasm about the topic during entire presentation. Lots of eye contact, great voice volume, tone and pacing. Hand gesture and body movements that support the presentation. Significantly increases audience's awareness of the topic, convinces the audience to recognize the



Step 6: Formative assessment



Online quizzes (Kahoot) using BYOD (mostly mobile phones) are proposed to check the new knowledge acquired by the rest of the class. Checking the students' new acquisitions by means of online quizzes keeps them more involved in the presentations. Students enjoy playing Kahoot. Gamification is always an effective way to assess the students. Being a formative assessment, the teacher may consider the scoring supplied by the quiz, but also ignore them as the real purpose of the quiz is students' self-assessment. The teacher may prepare the questions or each group may

provide them.



Step 7 Debate

Students are asked to discuss about controversial issues presented by the different groups.

i.e. *"Do you think that social network should censor extremist political movement?"*

"Interpersonal relationships: better or worse with technology?"

Quick surveys may be proposed using Mentimeter and BYOD.

Students move physically in the classroom and create a sort of arena where the two opposite teams present their points of view. The teacher or other students may play the role of moderators. Students should respect above all turn taking.

Debates represent a great activity to develop **critical thinking**, one of the most challenging skill of 21st century education.



Step 8 Practice and check

Back to the textbook, back to the essential. Students are given the opportunity to have a general perspective of the different topics and to reinforce their language with exercises to improve their new lexis and main concepts.

The textbook includes also a listening activity with interviews to common people about the use of technology, which may help them to have an idea of the general opinion outside the school about ICT.

In this project the textbook is an essential instrument to sum up the basic elements of each topic, while the different multimedia products represent a dig deeper activity.

CULTURE

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A further reinforcement activity is represented by the use of word clouds. The teacher asks the class to talk about the word highlighted (WordArt)



HOW TO SPOT FAKE NEWS?

1. Look for unusual URLs
2. Dissect the layout

http://totallytruenews.com.co

LOST RELIABLE NEWS IN TALLY TRUE HEADLINE

NO ONE UNDERSTANDS NEW WEATHER PATTERNS
February 31, 2017 - Meteorologists across the globe puzzled by just what these lines arrows and semi mean. Rodney Burgess, senior weatherman at W Cleveland says "We just don't know! So stop asking us how to best enjoy the weekend for the beach if your damn crocs are gonna sink!"

Multimedia tools may also represent a support for inclusion for disadvantaged students as multimedia products supply visual or audio aid and the possibility to watch them many times.

Step 10 :Testing and evaluation

Students are assessed also in a traditional way by means of a final individual written test, **summative assessment**, in order to comply with the regulations of the present Italian school system. The moments dedicated to the **formative assessment** (online quizzes, wordclouds etc..) represent a useful support the students' learning process.



Step: 11 Sharing



The final work (collection of multimedia projects on Padlet) will be shared on the Net so as to become available for other students inside or outside the school. If the final product is published, students will create it with more accuracy and motivation. Sharing knowledge is the new must of 21st century education.



Moreover, a special dedicated event involving families, school staff and other stakeholders of the community may be organised. Parents have the opportunity to see and appreciate their children's work, creating new forms of dialogue between families and teachers. The school should open its door to the outside world.

Conclusion

Digital literacy, one of the 8 key skills of 21st century education, entered in the school activity. Students have the opportunity to think about their everyday life use of technology. Cookies, digital tracking, fake news, violation of copyright, disappearing jobs and emerging professions, blackholes of social networks, censorship on the Net etc.. were analysed and created interest and curiosity in the students. The topics discussed are so relevant for the students that they should be introduced in all curricula as a transversal topic in the future. Students really need to know the different aspects of the Net, which represent such a big part of their life.



This project represents an example of CLIL activity where the students play a central role while the teacher plays different roles according to the stage of the project: motivator, creator of scaffolding, facilitator, moderator and supervisor and tester.

The project starts and finishes with the support of the textbook, which remains an essential tool for individual study, but around which a wider project is built.

My students, aged 15, were enthusiastic to live this learning experience where creativity, critical thinking, communication skills played a vital role. They really enjoyed this project and we had a lot of fun together.

Mirandola, Oct 18 2017

Prof. Elena Balestrazzi

*A child is not a vase to be filled,
but a fire to be lit.*

F. Rabelais

