



Erasmus+

ICT in Education

A good practice notebook

This text is the result of an Erasmus+ project, transectorial, designated: **"21st Century European Classrooms: meeting the challenge of the digital era with Innovation and Creativity"**. The project started on 1st September 2014. It was coordinated by the Agrupamento de Escolas de Atouguia da Baleia (Portugal) and had as partners the "Fundação Calouste Gulbenkian (Portugal), the "Miejskle Gimnazjum nr 1 im. Jana Pawła II z siedziba w Knurowie" (Poland), the "IIS Vittorio Emanuele II" (Italy), the "IES Las Banderas" (Spain), the "SOUEE Konstantin-Kiril Filosof" and Promethean Limited.

This is a presentation in context of some of the good practices founded during the project and represents an open document to be added with more testimonials of good practices presented by educational institutions or other stakeholders wanting to share them with the European public.





A

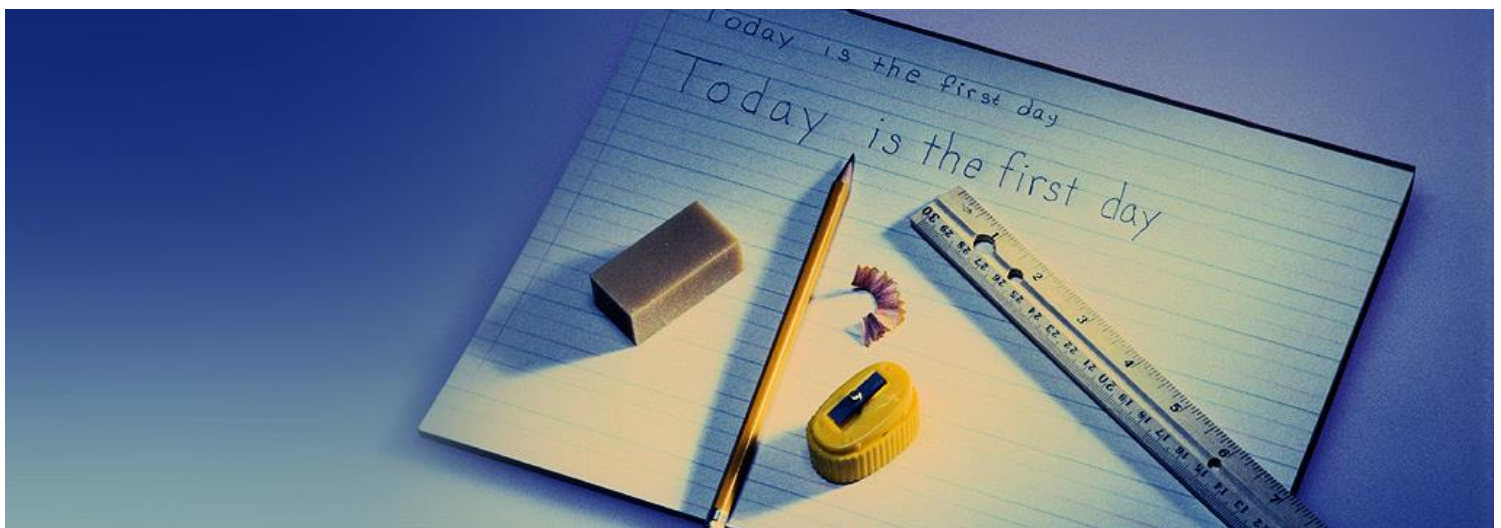
Project Presentation

We've build a partnership asking different kinds of institutions. We've thought that diversity would be one asset to get the perspectives of different kinds of schools.

The samples of good practices gathered in this notebook are in daily use in 4 schools in 4 different countries, Poland, Portugal, Spain and Italy. Those schools are quite different among them, in terms of size and context, even in educational project. The age of students and the interest in the use of information and communication technologies inside the classroom (and generally inside school) is however common and links the group.

We believe that would be important to create diverse background samples for good practices, in different levels of interaction with digital technology so every school around the world could relate to some of those practices and enabling them to profit from the presented experience, even if the context conditions are far from the ideal, because of economic, social or other restraints.

Every school is different, and every good practice must be seen as working in that specific context. The generalization of the presented practices only would be adequate to other schools with different identities with strategic adjustments. The general idea is to get starting points and showing tested and assessed practices to other schools and educational stakeholders.





A.1

The importance of the stakeholders: the role of “Promethean” and the role of “Fundação Calouste Gulbenkian”



In fact, although in the building of the project partnership process the quest for the best schools in different European countries, regarding the use of ICT in school/classroom, have been a priority, we were aware that had also to be conscientious of other conditions and interests on behalf of the school partners. All the partner schools were chosen for having showed a big interest in this matters of good practices with ICT, also giving proof of having tradition and evidences of successful work in the issues to be addressed and a praxis in sharing experiences.

In this notebook, the role of the non-school partners was also to provide a wider debate on those good practices and to get training and exogenous assessment. Having on board partners with such an experience and broad horizons on education and cutting-edge technology and pedagogy, has given us the audacity to grow in practices along the project duration.

The non-school partners' insight provided us with different approaches from more global perspectives and altering the usual horizon that usually capture the regards and the debate while inside school actors.

Each partner does not, and could not represent the origin country status quo on the use of ICT in school or classroom, but still it's a sample.

Different departure points by the different partners mean different levels of good practices. Having said that, also all the partners had different starting characteristics and different initial conditions, establishing a diversity that we felt as healthier and that could be related to the also diverse reality of schools thru out Europe.

When we went in this project we were not seeking for one model or one way of solving problems, because obviously each school has their specific characteristics and context, as well as different problems and resources. So, if we want to share good practices we need to get more diversity on the sample school, so we can get the message to the diversity of schools and stakeholders that eventually would read this notebook.



A.2

The importance of context

Every school is conditioned by its context. Sometimes have the means and/or the capacity to influence and drive the change in that context, but in one way or another, that context creates dynamics inside and all around the school that can determine responses and also force specific approaches and strategies as well as the need to adjust solutions and ideas. A school can't be a pedagogical island, because it is not isolated, couldn't be isolated, from that specific society, that specific time and that specific human, economic, financial and cultural resources of that unique reality where the school belongs. The school can bring change to the context where it intervenes, but it's also a daughter of that given context.

A good practice can only be considered a true good practice when reporting/referring to a given specific context, and in a different context could not be so.

We are aware of the weight of the context, therefore we must always relativize the specific good practices evidenced. We can only say that that practice works in that context. A reader from another school, in another moment or in another context, always has to adjust and to adapt, because good practices are not universal formulas for the success. They just intend to show a way, to present an idea... To say that if we can do it, so can you.



A.3

The importance of infrastructure like internet capability

Given the weight of telecommunications, namely internet, in the context of ICT inside school and classrooms, in order to insure the availability of resources it's fundamental that the infrastructure wideness and range of internet capability would be in line with the needs of access, both in number as in weight.

A technical failure based on a handicapped planning, counting with a non-existent or less efficient internet capability just kills any strategy of use of software or devices or communicational dynamics based in the immense potential of wearable information made available by such of technology.

The failure of a planned strategy developed in a classroom because of a deficit in the readiness of the infrastructure can and will represent a big setback in the dissemination of the awareness of the added value represented by those technological tools.



If a teacher can't develop or organize the dynamics of a class because he couldn't rely on the internet infrastructure or if the devices, for some reason, are not ready or if the software is not updated or dependable, then it's the return to a mistrust position and the return to comfort zone of the analogical class, losing the potential of the new resources and approaches.

A.4

The technology as a tool that allows taking another step on pedagogy

The most marvellous and updated communicational technology in your classroom can be just a very expensive piece of furniture if you don't use it in a pedagogical strategic, innovative and creative approach.

The technology itself only brings added value to school if we face it like a very important and useful tool to include in the pedagogical innovation and creativity. The ICT inside school allows you to enlarge the horizon of possibilities and to more easily relate it with the digital language natives represented by your students.

The pedagogical space gets a different dimension because you can interact with your students even if they are outside the specific classroom, you can get instant feedback on task progression or assessment, you can access to huge amounts of information, where your task gets an important component in coordinating the selection of information, by criteria of relevance, significance, reliability or...

Cooperative learning and/or flipped classroom assume a possibility with the assumption by the teacher and students of different roles, more in line with the new challenges provided by the 21st century.

The digital world approach in school and in the classroom is really the approach to our society and our students' languages. That's about building or reinforcing the bridges between school and the community, about narrowing the gap in communication, in interest and in understanding among the school community by using common referentials and speaking an understandable dialect/communicational methodology.





A.5

The importance of assessment

Empirically we can establish some degree of success for our classroom ICT strategies. We can also say that the good practice is the one that works for us and for our classes and our students. But still, the measure of success and the reliability of our options are very important to establish and plan improvement and for getting adjustments aiming to accomplish a higher degree of success.

So, it's very important to create a systematic assessment structure, enabling positive change and clear options. ICT allows you, in your classroom and in your school, to launch several and almost complete assessment interventions on your students work, on your own work, on your institution, on every aspect of education and to usually get instant response, enabling you to constant ability to adjust and redirect your strategy.

A.6

The progression / evolution during the project

The schools that have begun this project are very far from the schools that are now presenting this notebook. The whole process of interaction, debate, study, reflection and attentive assessment of the good practices, along with the intense sharing of good (and sometimes even the bad) experiences, have allowed every partner to pedagogically reinforce their experiences or to build new dynamics of intervention.

The results of the impact of this kind of project in partner schools are a continuous growing of material quality in the production of students and teachers' materials, and on the enlargement of the subjects involved in ICT dynamics. The digital world inside classrooms of the partner schools is now matching the role of the digital presence in society context.

The gaps among the level of digital incorporation in classes, between the different school partners are getting smaller and smaller, and we are witnessing an exponential improvement of the institutions that initially were less proficient or more peripheral on the use of ICT in classroom or school.

That's an achievement for the project and a clear evidence of the importance of sharing good practices among partners or among educational communities. And that's what this notebook is all about.



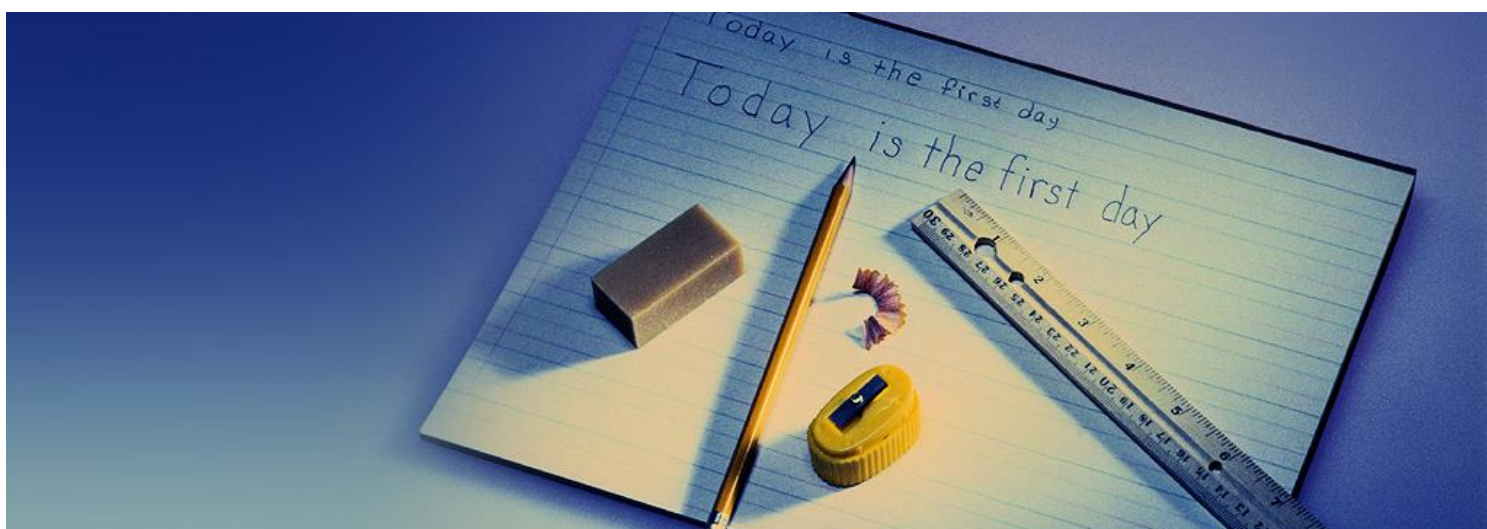
B

A conceptual guideline set

The template structure – what we need to acknowledge that a given practice is indeed a good practice that should be a part of this good practices notebook.

To deliver accurately the information about good practices among the project partners, related to the topics addressed in each chapter, we've tried to create a template that would give the reader the possibility of understanding the context conditions that explain the level of interaction of that specific school with the digital use of technology in education.

This template identifies the partner institution for each chapter, also enables some guidelines for theoretical approach and concept. There will be some pertinent context references concerning the main issue. The main core of the template, obviously, will be the good practices identification, justifying why they were selected (mainly because in that given context they work and/or they present better results than other practices) explaining the process, identifying the departure point, the assessment and impact in school and/or community. Whenever possible there will be a "next step"... presenting the future and addressing the problems to overcome.





B.1 Notebook Chapters



Chapter 1

Future Classroom: creativity and innovation;

Chapter 2

Effective Communication and successful learning and teaching;

Chapter 3

Internet and Web tools in the 21st century education;

Chapter 4

Future Classroom: students' evaluation system;

Chapter 5

Digital Literacy on students and teachers;

Chapter 6

Interactive Pedagogy: the use of educational aimed tools.

Frequently today's teachers are confronted with mastering the huge amount of digital skills and simultaneously also challenged by the need to be updated and to be innovative and creative in a world where the digital format constitutes an indispensable bridge towards the day by day reality of the students. The idea is to reinforce digital bridges of communication in a learning and teaching context, seeking to perform good practices concerning strategies and tools that can be of use and help, both for students and teachers, in the classrooms or more broadly in the school, understood as an open space of learning and teaching meaningful experiences.

To keep up with the ICT dynamics and to use them adequately in classroom context it's a challenge where the schools are always a bit late. Being conscientious of such a gap, nevertheless the schools can't afford to stand still or too late. So this project is about students and teachers around Europe, in several and diverse contexts and with plural ways of relate with ICT technologies in different kinds of classrooms, gathering experiences of different ways of dealing with the challenges mentioned above, defining and assuming good practices and creating school dynamics that facilitate overcoming some difficulties or problem situations regarding the digital era and the needs to obtain better performance by the European classrooms in the 21st century.

This project departs from the assumed need of diminishing the gap between the digital use of technology inside and outside the School and also the need to be creative and innovative by using digital tools and strategies incorporating ICT techniques. Teachers are fundamental to potentiate the evolution needed towards the future classroom.



B.2 Main goals for the notebook project



We intend to have some significant and practical output regarding the improvement of management procedures of the classroom. We feel that this project can help to explore alternative ways towards teaching and learning by studying different learning scenarios across Europe.

By acting upon the students' autonomy and enhancing their critic and cooperating skills, we think that we may obtain new ways of interactive performance, aiming to improve their results (academic and personal/civic).

We perspective the innovation and creativity of this project, by exchanging and creating new pedagogical materials as well as devising new strategies of articulation in the dynamics of the classroom.

We are aiming to re-think new ways to revisit educational/traditional spaces, like classrooms and school libraries, introducing ideas and concepts to accommodate notions like open space classes, and multi space teaching, as eventually compatible with the digital cloud of information/resources.

We must underline the importance of the learning rhythm provided by the innovative and creative use of ICT, and the role that effective and a more speedy evaluation of the management of the tasks and skills and their progress may represent using new tools and techniques.

In fact, the evaluation action, performed by teachers and students in several ways, in line with the rhythm of the learning needs and progresses, may be one of the most important issues to address using new techniques, tools and strategies.

We think that our approach may be innovative to obtain and establish a good practices platform for the learning and teaching actors reaching over the technological gap that so often exists between the digital world outside the school walls, out of the classroom, and the interpretation of the use of ICT by teachers, sometimes turning outdated innovative tools by managing them in an obsolete way.

We want also to learn about the students expectations about the ICT use in classroom and about the way they are used as learning and teaching resource (not only in a strict communicational sense).

We seek to establish a good practices platform to help learning and teaching actors to more easily use ICT as a resource, mainly regarding the accessibility problems or advantages, the selection of information, the language, etc. Bottom line, how does the ICT help you to make better or different on matter of education.



would be held by the physical presence in meetings around the partners countries, having the support of the know-how and experience of a partner like the Fundação Calouste Gulbenkian.

There's are also other collateral goals intended by this project, such as the joined investigation on subjects concerning the mainstream underlined on this project title, regarding education, ICT and pedagogy, the production of materials to spread de debates and the good practices awareness, departing from the partner countries and sharing with others, using ICT ways.

Our schools and in our classes we must to be able to keep amazing our students and teachers about learning and teaching. Improving skills, exchanging good practices and building new dynamics for classroom in an ICT and digital context, allows students and the transversal nature stated by this project goals, both for students and for teachers, creates a greater impact dimension for the wanted results at the end of the projects. As curriculum concerns, this transversal approach on digital and ICT impacts in wider range of subjects, ages, themes and classes.

This project had also as fundamental goals, not only the exchange of experiences, building and sharing of good practices, skills improvement and pedagogical materials product in, but also the need for the teacher around Europe debate and develop awareness on steps needed and taken in different schools, about the theme of this project, with different backgrounds and different kind of solutions or ways to deal with sometimes similar problems. This space of debate and exchange of ideas and innovative projects, among teacher, seeking for innovative classroom management, appealing to ICT resources and strategies





B.3 Partner School Contexts



This notebook is about presenting and exchanging innovative projects among the partners, to eventual sharing activities with the other teacher around Europe, seeking an innovative management of the psychopedagogical classroom, appealing to ICT resources, tools and strategies. It's all about experiences exchange aiming for the improvement in classroom work, objectifying strong and weak point in the use of the digital ways in class.



B.3.1 Partner School Contexts

PROJECT COORDINATOR and School Partner: “AE de Atougia da Baleia (Peniche - Portugal)”

The School of Atougia da Baleia is the leader of a cluster with 16 several ranked schools, counting with more than 1100 students. Situated in the west of Portugal, at about 80 km north of Lisbon. The School has clearly inscribed, in its educative project, as a main axe for the next years, the investment on developing the uses and appliances of the digital world and communications within the classrooms and learning opportunities for students, as well as training investment for teachers. Aged between 10 till 15 years old, the students at the leader school of this group, are skilled at the use of ICT.

The school staff is composed by over 80 teachers and 30 auxiliary personnel. Since 2013 this institution has pedagogical autonomy granted by the Ministry of Education and Science of Portugal, and since then they are creating specific curricula and enhancing changes and using this autonomy to improve several sectors inside the institution, supported by the community and starting to get results in the school dynamics and students' results.



The School of Atouguia da Baleia has a solid tradition in the use of information and communication technologies among the educative community and above all in use inside the classroom and in learning and teaching dynamics. Recently we have established links with institutions of ICT research and development, in order to become more update on educational appliances.

So, we can say that in the end they think they are an educational community that rather frequently uses mobile technology as a basis to the learning and teaching process in articulation with the global world and using and taking advantage of their learning situations.

Taking an effort to walk to the future classroom they've obtained the recent support of the Fundação Calouste Gulbenkian financing a project to build a maths and sciences lab based on mobile and high-tech equipment as well as teacher's specific training.

They also have been joining efforts with the global educational company "Promethean" (interactive education technology for schools) testing hardware and software for education in real classrooms.

B.3.2 Partner School Contexts

School Partner: "Miejskie Gimnazjum nr 1 im. Jana Pawła II z siedzibą w Knurowie (Knurow - Poland)

The school is located in Knurów. It has 133 students, 18 teachers and 5 service workers. The school is for students aged 13 to 16. In the Polish educational system it is the third stage of general education. The school prepares students to learn in high schools and vocational schools where they achieve average results.

In our school about 30% of the students need help in learning, but also about 20% requires assistance in the development of their talents and interests. There's a system of monitoring current teaching results which are analyzed quantitatively and qualitatively. The results of the final examination show the quality of the work of the school and they are very important.

The aim of the school is to improve educational outcomes, especially in maths and science that are the most difficult for students. It is also important to raise students' motivation to learn by using ICT skills and increase the professionalism of teachers in ICT area too. It will help to make the lessons more attractive and involving.

Teachers usually use ICT almost every day. In addition to that, they use an electronic register to monitor students' attendance and communicate with their parents. Teachers of foreign languages (English and German) as well as a history teacher, they use interactive whiteboards with. The school has two classrooms equipped with desktop PCs (including 36 computers), interactive whiteboards, multimedia projectors, but not all teachers use them. There is a specific need to engage them in the process of modernization of working methods with the use of ICT among teachers of maths and science.





B.3.3 Partner School Contexts



“Only a part of our teachers use virtual classrooms and interactive whiteboard in their daily teaching. The rest of the staff goes on using traditional teaching methodology.”



School Partner: “IIS Vittorio Emanuele II” (Naples - Italy)

I.I.S. V. Emanuele II is a technical and vocational school with three different 5 year courses, one based on administration, marketing and languages, one based on ICT commercial promotion and advertising and the third one based on social studies. The school population is approximately of 800 students, of which 32 are in the condition of disability. There are 100 teachers. The school is equipped with four computer labs, a science lab, two large gymnasiums and outdoor sports spaces, which allow a number of extra-curricular optional activities.

The bulk of students at I.I.S V. Emanuele (aged 14 to 20) come from a working-class environment, which has traditionally suffered from a lack in opportunity in southern Italy.

The institute operates in an area with a high socio-economic disadvantage and at high risk of drop-out. The percentage of non- admitted to the next class is about 30% , while the percentage of drop-out , formalized or not, is 15%, and the school represents the only real opportunity for growth and practice of active citizenship.

In the last years “Vittorio Emanuele II” Institute, thanks to government/EU funds, is completely renewing its digital equipment (Wireless, Internet connection, computers and IWB in each classroom, modern multimedia labs, etc.). The Institute has been a teacher training center for “DIDATEC” a national program whose purpose is to spread the use of technology among teachers.



B.3.4 Partner School Contexts



"Our school use technologies in every lesson and subject. First of all, all our classrooms have got a digital board. Every teacher uses it to show the students power points (...) and they are also very useful to use Internet.

Our experience makes us to be eager to go on learning new technologies and how to use them with our students."



School Partner: "IES LAS BANDERAS" (Puerto Santa Maria - Spain)

IES LAS BANDERAS is a public school of Secondary Education, placed in El Puerto de Santa Maria, Cádiz, in the South of Spain.

In the previous years the school was dedicated to primary education, but now it covers from 12-15 years old students.

This year has got approximately 125 students distributed in four levels (1º ESO-4º ESO). In general, they belong to middle-class.

The school has got two main projects, among others:

- The bilingual project: it belongs to the bilingual project since 2009. It means that subjects such as Geography, History, Maths, Art and P.E. are taught in L2 (English language).

- Tech-school (in Spanish Escuela TIC): It means that we use technologies in many aspects of our teaching labour and we encourage students to use them as much as possible.

We use several techniques to encourage our students and to store all their production in L2. On one hand, we have created a web in the Moodle platform through which students can send us all the projects related to any topic they are studying.

On the other hand, we use Google Drive to work with them the E-Portfolio. We have created personal files to store all the students work and when they finish the year we give them a kind of "passport" where they can see the level they have reached. This practice motivates them a lot.

So, we can say, that I.E.S. Las Banderas has got big experience in using technologies in our daily work in education.



B.3.5 Partner School Contexts



“From the teachers’ point of view, this is a very good opportunity to get input from other European teaching traditions, share good practice and broaden the horizon with new teaching skills. To bring home best practice from so many different European countries will be a unique chance. Our aim is to help our students on their way to develop their language and computer skills as well as to become open-minded, self-confident people without prejudices toward foreign cultures and lifestyles. Although we use some interactive activities during the lessons, we still miss good practices in this area.

Today, much success lies in being able to communicate, share, and use information to solve complex problems, in being able to adapt and innovate in response to new demands and changing circumstances, in being able to command and expand the power of technology to create new knowledge”.



School Partner: “SOUEE "Konstantin-Kiril Filosof" (Ruse - Bulgaria)

The Secondary School with the Study of European Languages “St Constantin-Cyril the Philosopher” is located in the town of Ruse, the biggest Bulgarian town on the River Danube. The school was founded in 1961 and it is a public secondary language school.

English, German, French, Spanish and Russian are taught in it. About 1500 students study at the school.

The school successfully combines the mastering of foreign languages with basic computer literacy and IT competence.

The children are mostly from Ruse but there is a significant number who commute every day or live in the town without their parents. These have different backgrounds and interests.

The staff is highly experienced and the majority of the students are very intelligent, creative as well as motivated to gain more knowledge.

Nevertheless, there are some students that think of school only as a source of fun or place for meeting friends. It would be really essential to involve them into project work and show them the importance of being highly educated and ambitious.

The students aged 15-18 will take part in this Multilateral Project. This will give them the chance to join and be part of extracurricular activities resulting from the project as well as to grow more interested in curricular subjects related to the project development. Thus, we hope the students will develop their understanding of otherness and that in the digital era they could become not only knowledgeable but more tolerant and democratic citizens. In addition, students of poor families will also get the chance to travel.



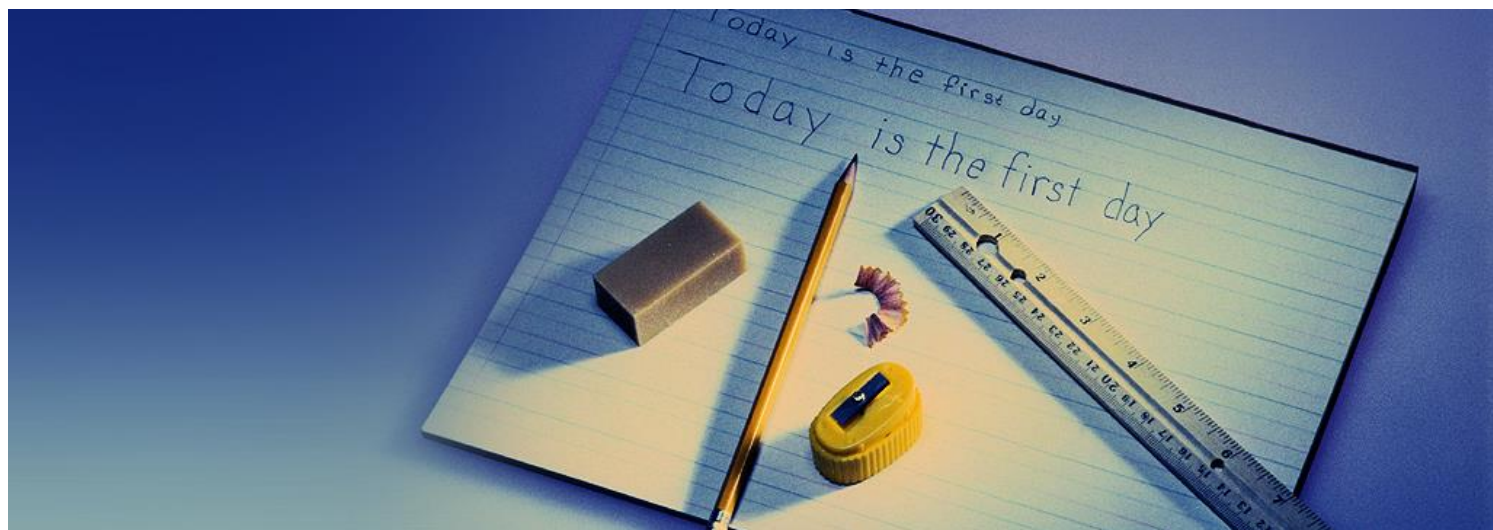
C1

Chapter One

Future Classroom: creativity and innovation



We will not lose ourselves in the debate, eventually very important, on what do we call “future classroom”, because is about something that’s already here, not in the future, but now. At least now for some of us, not for others, because our contexts and structures are different, as different are our society demands and expectations. So for us, the future classroom might be the school knowledge place where the most recent learning scenarios are in place articulating with pedagogical approaches that use the advantages of the technology and of the science advances to get a better education for our students. It’s the place in schools where the innovation and creativity should be more stimulated and where the most advanced notions of education are putted in place to get the best results for educational goals.





C.1.1

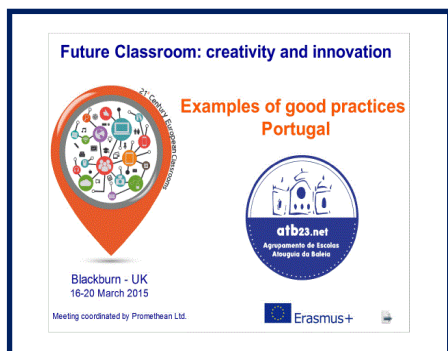
“Without world-class support, resources and real-world knowledge from an extraordinary network of users, technology is only hardware and software. We believe in the power of relationships and the exchange of knowledge that results from collaboration. After all, the best ideas often grow from many minds sharing and working together.”



The future classroom has to be a place that nourishes creativity and that's also a "room" for innovation. Pedagogical innovation, renewed interaction dynamics, strong competences on presentation and exchanging ideas and thoughts... a place to be happy and to learn and share at the speed of the brain.

But... The future classroom starts now, starts today and each day for each student and each teacher. So what do we think for today's future classroom? What's the innovational end creativity dimension that we can start pointing as a school dynamic into to near future in each partner school of this project?

So, getting out of the way the conceptual "thing". We will try to explain for our readers what a future classroom is, for each school partner of this project, hopefully using creativity and innovation in that scenario. We've tried to show what do we think that can be the future dynamics inside classroom that we've already started in our schools.



Chapter 1 - Creativity and innovation

LINKS (Videos and other presentations)

<http://www.21digitalclass.com/partner-presentations-1.html>

Bulgaria

http://prezi.com/z70c1tkge2bz/?utm_campaign=share&utm_medium=copy&rc=ex0share - PREZI (teachers presentation)

<https://www.youtube.com/watch?v=9TLhv0tdzxU> - Video (presentation of the school)



Spain

<https://www.youtube.com/watch?v=7h5ZswcVBIk> - Video (presentation of the school)



Portugal

<https://www.youtube.com/watch?v=bONbEcEiMZ0> - Video (presentation of the school)

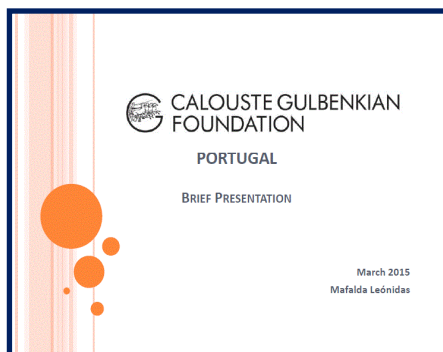
Italy

https://www.youtube.com/watch?v=nmAt_x57X60 - Video (presentation of the school)





Poland

<https://www.youtube.com/watch?v=ouEaxG7G7mg> - Video (presentation of the school)





Good Practices Description by Partner School

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 1
Future Classroom: Creativity and Innovation

1. School/Institution Vittorio Emanuele II - Italy

2. Theoretical approach or conceptual guideline
Structuring axes of our education plan:



- ICT opportunities and Digital skills
- Citizenship Education
- Improving foreign languages skills
- Fostering the access into the labour market

3. Context references pertinent to the main issue

- Creating a Future Classroom Learning Scenario
- Implementing strategies to motivate the study
- Hands on with future tools for students to create and innovate

4. Good practices identification by each partner

4.1. Immersive Teaching: a Linguistic Land in Second Life (L.S.)
This Immersive Education project aims to explore and strengthen the potential for education of so-called "virtual worlds". Virtual worlds are online 3D computer-simulated environments in which users - mediated by an avatar - can explore environments, help to realize them, attend and plan activities, communicate with other users.

21st CENTURY EUROPEAN CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 1: FUTURE CLASSROOM: Creativity and Innovation




Good Practices

Creativity is an ability to create something new to generate new possibilities or to perceive ideas and things from a different, original, novel perspective.

Innovation is referred to all changes, which contribute to progress. Innovation as a process includes all activities related to create an idea and its implementation.

The development of knowledge and rapid progress, which is observed in different areas of our life in the contemporary world, make changes and challenges in education. The role of teachers is changing. Teachers face to new situation. They need to prepare students for living in changing and unpredictable world, in which not only knowledge, but skills are crucial. Young people, as in one generation in the past, need to be creative and innovative, to find their place in future.

In Mejskja Gimnazija nr 1 im. Jona Pevla II in Krasov, teachers are aware of their role and tasks. Creativity is important in our school. It is one of main aim that we focus on and plan to develop in the nearest five years as it's included in school policy.

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 1: FUTURE CLASSROOM: Creativity and Innovation

Good Practices

1. School/Institution
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN

2. Theoretical approach or conceptual guideline
Structuring axes of our Educational Project:



- Bilingual Education
- ICT school
- Cooperative Learning
- Students level diversity

3. Context references pertinent to the main issue

- Use of ICT resources in our everyday work
- Encourage students cooperation
- Promote a more active learning process
- Respect the diverse talents and ways of learning

4. Good practices identification
Digital Boards, Gmails, Google Drive, use of different devices (tablets, laptops...) and applications (Prezi, Powtoon, Zoho Creations, Discuto, Symbaloo...)

a. Justification (why is that a good practice?)
I. Context

21st Century European Classrooms:
Meeting the challenge of the digital era with innovation and creativity

Chapter 1: FUTURE CLASSROOM: Creativity and Innovation




1. School/Institution
SOUEE "Konstantin Kiril Filosof" – Ruse, Bulgaria

2. Theoretical approach or conceptual guideline
Main bases of the project at our school:

- English-based learning (supplementary French, German, Spanish, Russian)
- Intersubject relations
- Use of technologies at school
- Different learning styles according to students' accomplishments

3. Context references pertinent to the main issue

- ICT tools application
- Boost intersubject relations
- Aiming at developing creativity and innovation in teaching and learning
- Improving language and communicative skills by using interactive approaches

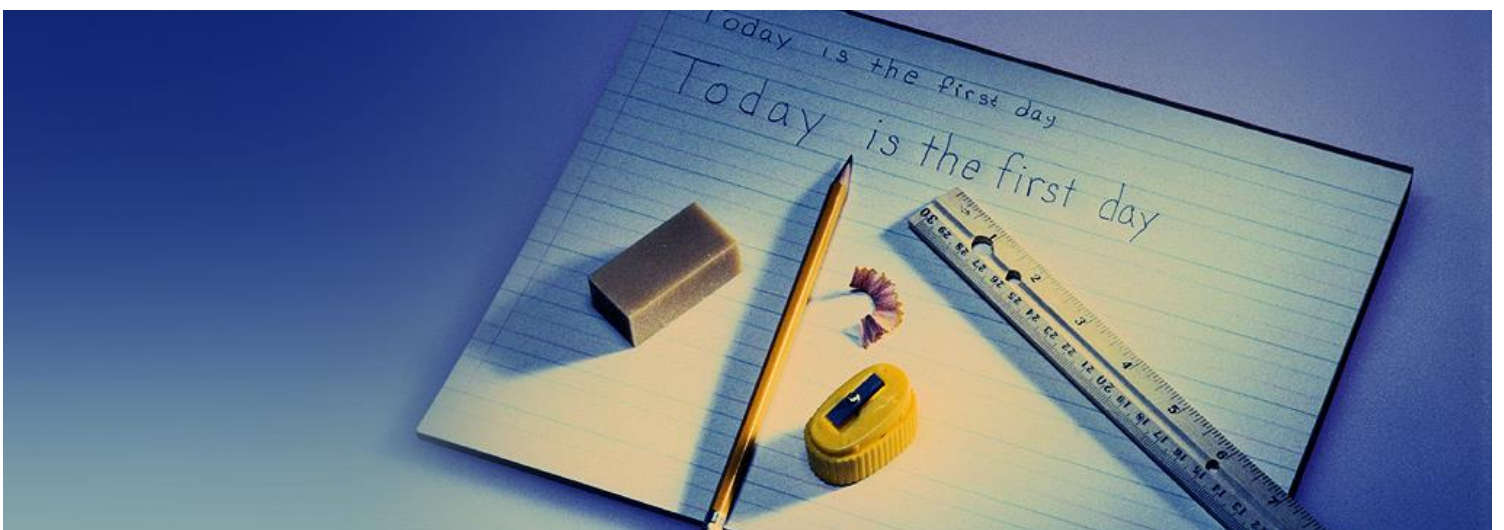




21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 1: Future classroom: Creativity and Innovation

Good Practices

1. School/Institution	Agrupamento de Escolas de Atouguia da Baleia - Portugal
2. Theoretical approach or conceptual guideline	Structuring axes of our School Educational Project: - Technology and communication - Citizenship Education - Heritage and environmental education - Cultural identity and innovation
3. Context references pertinent to the main issue	- Produce educational resources - Use a variety of web tools and devices - Instant feedback and formative evaluation
4. Good practices identification	Use interactive and stimulating learning environments, such as: ActiInspire; Padlet; ClassFlow; Thinglink; Aurasma; Edupuzzle; Content Generator; Scratch; ActiTable.com/builder.
5. Justification (Why is it a good practice?)	- Using active learning methodology, giving tasks to students/scripts well-defined, allowed students to developed several skills: - To solve problems; - To communicate; - To mobilize knowledge; - To promote collaborative work; - To motivate to learning
Context	- Using this kind of methodology allowed to diversify approaches and stimulate students by the permanent innovation. - With the use of this kind of tools, the students can receive instant feedback and made the necessary changes. - Create instant feedback of results;





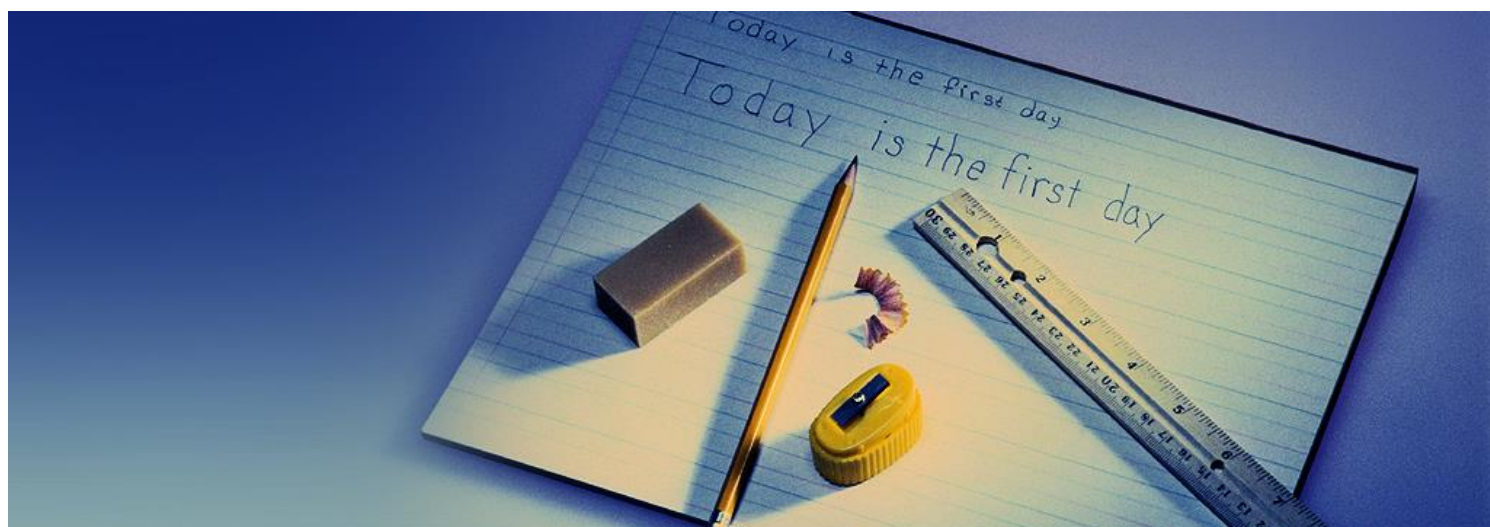
C2

Chapter Two

Effective Communication and Successful learning and teaching.

A major issue for a teaching and learning successful process is to render the communication effective. That means that the quality of the communication, as well as the language, the channels, the understanding of the participants is fundamental to get things done in matter of education.

The digital language can't stand outside our schools as if it was a lesser way of communication, not worthy of the school universe. The digital language is the language of our students and using it inside our classes is narrowing the gap between school and the 21st century. Usually the School, namely the teachers, have entered the new millennium in a delay facing the challenges that the communication and technological revolution as set in motion. Most schools still stand analogical in a digital Era, dealing with digital native students.





C.2.1

Do we think that we, as teachers and educators, can remain/endure just as knowledge dispensers, or we strategically embrace the different roles (coordination, organization, motivation...) suggested by the needs of a more effective communication?



The school, thru times was all about communication, getting that communication as effective as it can be, has been the basis to develop knowledge and education. The quality jump that our generation of teacher is witnessing, regarding the reinforcement of the communication role in our society, has created the ultimate challenge to our profession... To evolve and adjust or to be just a by stander to the dynamics in place.



Chapter 2 – Effective communication LINKS (Videos and other presentations)

<http://www.21digitalclass.com/partner-presentations-2.html>

Bulgaria

<https://www.youtube.com/watch?v=Tcl-rYm-11I&feature=youtu.be> – Video – Presentation of Ruse



Spain

http://prezi.com/7viopdhoyzdj/?utm_campaign=share&utm_medium=copy&rc=ex0share – Teachers presentation (Prezi)

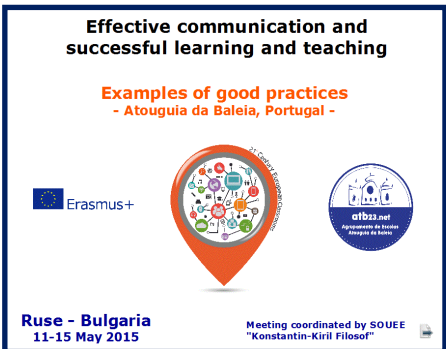
http://prezi.com/pqiyulisjc1-/?utm_campaign=share&utm_medium=copy&rc=ex0share – Students presentation



Portugal

<http://ai2.appinventor.mit.edu/?galleryId=6272144479617024> – Student's App about Portugal

<http://ai2.appinventor.mit.edu/?galleryId=5459068125708288> – Student's App about atb23



Italy

<http://learningdesigner.org/viewer.php?uri=/shared/fid/d9784e1defbe905084be6fcba3c8671b343bf74f357fff03b83395b6b351904a> – Teachers Presentation - A visual tale: The Storyboard (Learning Designer)

<https://it.padlet.com/lisasomma2015/storyboarding> – Teachers Presentation - A Digital Storytelling Project: the storyboard (Padlet)





Good Practices Description by Partner School

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Erasmus+ logo and project logo.

Chapter 2: EFFECTIVE COMMUNICATION AND A SUCCESSFUL LEARNING AND TEACHING
Good Practices

1. School/Institution
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN

2. Theoretical approach or conceptual guideline
Structuring axes of our Educational Project:
- Bilingual Education
- ICT school
- Cooperative Learning
- Diversity of students levels

3. Context references pertinent to the main issue
- Importance of sharing information with other teachers, students and parents
- Problems in getting a successful communication using the traditional ways: ordinary mail, letters, students diaries...
- Lack of creativity in spite of technology presence in our classrooms
- Individual work (isolation of teaching/learning process)
- Increasing concern and interest in adopting new ways of communication using ICTs

4. Good practices identification
Sharing and understanding information between the teacher and student through an interactive exchange of messages, using the new resources, such as digital boards, but with creativity and innovation, and always from an interactive point of view: multimedia presentations using different applications

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Erasmus+ logo and project logo.

Chapter 2
Future Classroom: Effective communication and successful learning and teaching

1. School/Institution Vittorio Emanuele II - Italy

2. Theoretical approach or conceptual guideline
Structuring axes of our education plan:
• Subjectivity, Objectivity – digital and life skills
• Connecting with the school community
• Citizenship Education
• Diminishing the gap between the digital use of ICT inside and outside Schools
• Improving foreign languages skills
• Fostering the access into the labour market

3. Context references pertinent to the main issue
• Creating the conditions for a Future Classroom Learning Scenario
• Reinforcing digital bridges of communication, in a learning and teaching concept
• Implementing strategies to motivate the study
• To help, bolster and promote students and teachers achievement.
• To recognize the value to build positive relationships.

21st CENTURY EUROPEAN CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Erasmus+ logo and project logo.

CHAPTER 2
Effective communication and successful learning and teaching

Communication is the process in which at least two participants are involved (the sender and receiver). There are a lot of factors that determine that process. In schools communication is crucial issue that enables the process of teaching and learning. But only effective communication, when all school community members understand what is said and support school in all activities, is the way to achieve success. There are different areas in which the process can be observed. In the digital era, in the schools, the Internet tools for effective communication are used more often. They can be more or less formal and offer different possibilities. One of the best tools seems to be the electronic register. The electronic registers are very popular as a tool in which in one place all documents such as students data, certificates, curriculum, resources can be collected and shared with students, teachers and parents. Nowadays, more and more schools start to use the electronic registers which replace paper form. It's a very essential tool for different purposes. In our school we use variety tools to communicate.

Our school society communicate using face book, webpage but for formal communication the best tool is the electronic register. The electronic register is one of the most useful tools, as it gathers a lot of functions in one place. The data collected in this register are analysed for statistic purposes. Teachers can easy control how school functions in different areas. The electronic register was put in practice in 2007.

21st CENTURY EUROPEAN CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Erasmus+ logo and project logo.

Chapter 4: Effective Communication and successful learning and teaching
Good Practices

1. School/Institution
Agrupamento de Escolas de Atouguia da Baia - Portugal

2. Theoretical approach or conceptual guideline
Structuring axes of our School Educational Project:
- Technology and communication
- Citizenship Education
- Education for the success

3. Context references pertinent to the main issue
- Use educational aimed tools in school
- Promote students' collaborative work
- Create innovation and increase creativity
- Accessibility
- Centralization of communication
- Sharing resources
- Sharing of information

4. Good practices identification
Use of several interactive tools in the school with different facets:
- Classcharts (students' behaviour management by teachers and parents)
- GARE (Management of Educational Resources and Activities)
- Inov@r@unos (Electronic Register System)
- Documental management
- Institutional email
- U@l@ct@s (Minutes management)
- Web Clouds (Contents Management Systems by different school departments)

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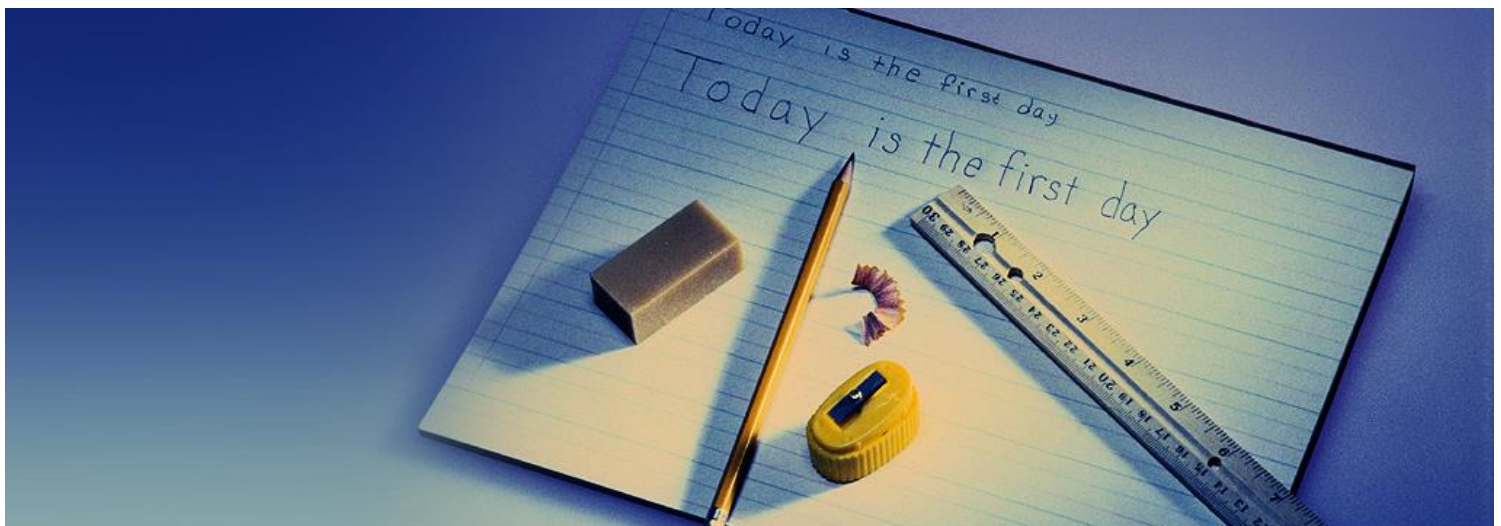
Erasmus+ logo and project logo.

Chapter 2:
Effective Communication and Successful learning and teaching

1. School/Institution
SOUEE "Konstantin Kiril Filosof" – Ruse, Bulgaria

2. Theoretical approach or conceptual guideline
• Effective communication in SOUEE "Konstantin Kiril Filosof" on the bases of teaching and learning English, French, German, Spanish, Russian languages
• Successful teaching and practicing intersubject relations
• Successful teaching and learning in the context of using ICT
• Different communicative approaches due to students' accomplishments and learning styles

3. Context references pertinent to the main issue
• ICT tools application
• Boost intersubject relations
• Aiming at developing creativity and innovation in teaching and learning
• Improving language and communicative skills by using interactive approaches





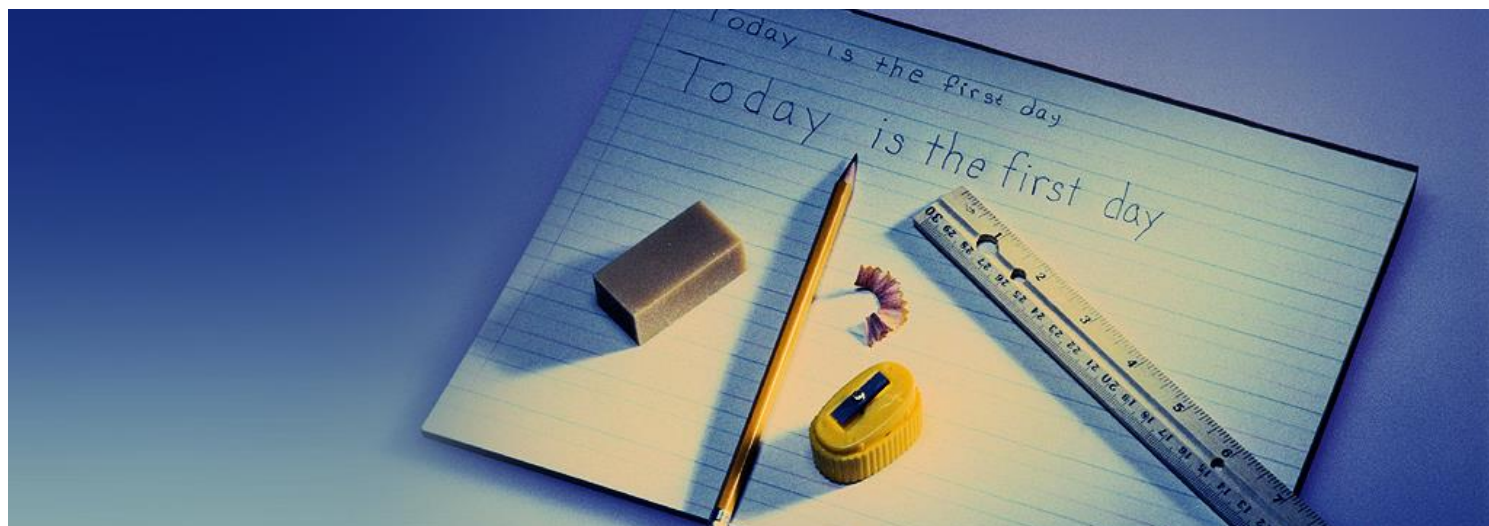
C3

Chapter Three

Internet and Web Tools in 21st century education.

Regarding this chapter, the good practices presented by “Las Banderas” school, are specifically related to the structuring axes of the Educational Project, namely: the importance of the bilingual education with a strong component of ICT in the curriculum and in the day by day practice in classroom. Also the cooperative learning and the diversity of students’ levels, are fundamental conditions to understand the selected good practices on effective communication.

There were several issues that have stimulated the development of the practices that we are going to underline, such as, the importance of sharing information with other teachers, students and parents; the existence of problems in getting a successful communication using the traditional ways: ordinary mail, letters, students’ diaries... Also a demanding situation was some lack of creativity in spite of technology presence in our classrooms, sometimes caused by the excess of individual work (isolation of teaching/learning process). In the other hand there was an increasing concern and interest in adopting new ways of communication using ICT.





C.3.1

Mainly about sharing and understanding information between the teacher and student through an interactive exchange of messages, using the new resources, such as digital boards, but with creativity and innovation, and always from an interactive point of view: multimedia presentations using different applications



Being the IES Las Banderas a bilingual school belonging to the ICT schools net in Andalucía. This ICT project implies the use of ICT resources in daily labour and taking advantage of them in lessons.

In "Las Banderas" we were aware and understanding the tendencies of failure in a successful learning and teaching process, also we felt the discomfort of many teachers with the results, the lack of students' involvement and motivation in the daily activities with somehow natural increasing behaviour problems in classroom.

The problems that we face are the need to have different devices and a good technological infrastructure, namely problems with Internet access. Also, teachers needed an adequate training to take advantage of the different tools. But sometimes we faced also some lack of motivation and personal initiative or the reluctance of many teachers to update and introduce the new technologies in their lessons. Finally a constant problem... not enough public investment.



Chapter 3 – Internet and web tools LINKS (Students' websites and other presentations)

<http://www.21digitalclass.com/partner-presentations-3.html>

Spain

<https://lasbanderaserasmusplus.wordpress.com/> - Students' website



Portugal

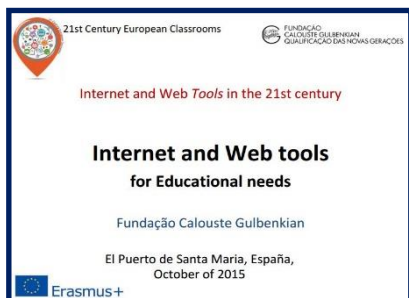
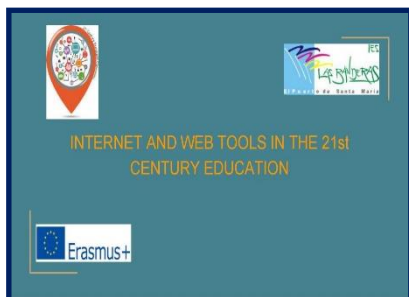
<https://www.emaze.com/@AIIRZFTL/web-tools-atouguia-da-baleia> - Teachers presentation (Emaze)

<http://inessantosportugal.wixsite.com/atb23erasmus> - Inês Santos's website

<http://joana20neves.wixsite.com/erasmus> - Joana Neves's website

<http://tecnic8dnr02.wixsite.com/erasmus> - Ana Rita Ferreira's website

<http://mcorreia1409.wixsite.com/erasmus> - Madalena Correia's website



Italy

<http://www.artcreation.it/spainapps.html> - Students' website



Poland

<http://t02matuszek.wixsite.com/appofpoland> - Mateusz and Tomek's website

<http://jm2210.wixsite.com/astronomyandierasmus> - Astronomy and me - Mateusz Malcherek's website

<http://t02matuszek.wixsite.com/sports-lives> - Sports in the world - Tomas Matuszek's website



Bulgaria

<http://ourconnection.wixsite.com/erasmus> - Students' website





Good Practices Description by Partner School

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 3
Future Classroom: Internet and WEB Tools in 21st century education

1. School/Institution Vittorio Emanuele II - Italy
2. Theoretical approach or conceptual guideline
Structuring axes of our education plan:
 - Technology and Communication
 - Perform good practices concerning strategies and tools that can be of use and help, both for students and teachers
 - Diminishing the gap between the digital use of ICT inside and outside Schools
 - Citizenship Education
 - Improving foreign languages skills
 - Fostering the access into the labour market
3. Context references pertinent to the main issue
 - Creating the conditions for a Future Classroom Learning Scenario
 - Reinforcing digital bridges of communication, in a learning and teaching concept
 - Implementing strategies to motivate the study
 - To help, bolster and promote students and teachers achievement.

21st CENTURY EUROPEAN CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

CHAPTER 3
Internet and Web Tools in 21st Century Education

Our school is a small school. We have about 130 students and 16 teachers, not all have full employment. The school building is one of the oldest on our town, we have 8 classrooms, including 3 computer labs with 14 and 13 PCs. Four interactive boards, two digital projectors and 7 laptops are used by our teachers. Although, our awareness of using modern technology as increased recently, we still teach in traditional way too much.

Participation and cooperation in this project give us opportunity to change this situation. We are offered a lot of tools to teach in modern way, more effective and what is more, this project will change our way of thinking, inspire and motivate us to make more efforts. The higher-level of awareness of new style of teaching is a clue to join our aims.

Example of good practice(s)	Electronic register, Prezi, GeoGebra, LearningApps, Google Drive, YouTube, Edi Publisher, Gmail
Justification (Why is that a good practice?)	These tools are very useful for students and teachers as they are easy to be adopted to practice. Students are more motivated and involved in learning. The internet tools make preparing lessons more time consuming, but lessons with modern tools are more effective and benefits as well as students and teachers.

21st Century European Classrooms:
Meeting the challenge of the digital era with innovation and creativity

Chapter 3: Internet and Web Tools in 21st century education

1. School/Institution
SOUJEE "Konstantin Kiril Filosoff" – Ruse, Bulgaria
2. Theoretical approach or conceptual guideline
 - What are Internet tools – applications that help, classics like WinZip and Acrobat Reader, browser additions, desktop tools for specific functions.
 - Why do we use them?
 - To expand your knowledge and horizons,
 - Because technology should work for you,
 - Because you should always be up-to-date,
 - To gain skills built on new experiences.
3. Context references pertinent to the main issue
 - ICT tools application
 - Boost intersubject relations
 - aiming at developing creativity and innovation in teaching and learning
 - Improving language and communicative skills by using interactive approaches

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Chapter 3: INTERNET AND WEB TOOLS IN THE 21ST CENTURY EDUCATION

Good Practices

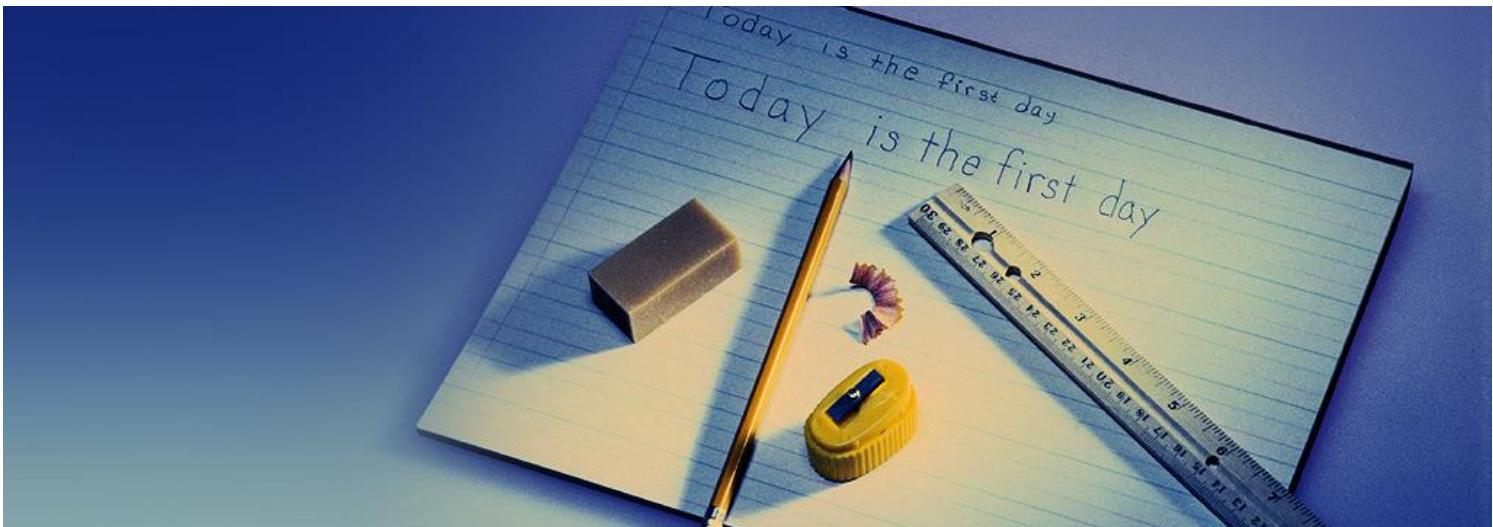
1. School/Institution
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN
2. Theoretical approach or conceptual guideline
Structuring axes of our Educational Project:
 - Internet Impact on Education
 - Improvement of communication
 - Easier access to information
3. Context references pertinent to the main issue
 - 2003 as the starting point for Andalucía to introduce ICTs tools among schools
 - To promote a better life level and social equality and improve competitiveness
 - Introduction of ICT in the school curricular projects
 - ICT coordinators at schools
 - Supply of different devices at schools
 - Creation of an own browser: Guadalinex (Linux)
 - Promotion of technological training among teachers
4. Good practices identification
 - Different Google Apps: Drive, Gmail, Calendar, Forms, Documents, Presentations, Blogs, Youtube, ... and more recently Google Classroom.
 - Others: Symboloo, Socrative, Prezi, Padlet, Powtoon...

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Chapter 3: Internet and web tools in the 21st century education

Good Practices

1. School/Institution Agrupamento de Escolas de Arouguia da Baleia - Portugal	
2. Theoretical approach or conceptual guideline Structuring axes of our School Educational Project: <ul style="list-style-type: none"> - Technology and communication - Citizenship Education - Heritage and environmental education - Cultural identity and innovation 	
3. Context references pertinent to the main issue <ul style="list-style-type: none"> - Disseminate local heritage and schoolwork - Produce educational resources - Use a variety of web tools. 	
4. Good practices identification Virtual tours and web tools used in a school context (www.oeste360.pt)	
a. Justification (Why is it a good practice?) In our region there is a rich heritage and a strong need to develop cultural tourism to support maritime activities. ICT appear as an effective tool to emphasize and to scale on the easiest way for the operators and administrative structures to handle the amount of information and to serve this information to the local population and also to foreigners.	
b. Problem situation or Dream Departure Build an educational and information tool in digital language to help schools and other economical and administrative institutions to disseminate the enormous treasure represented by our heritage, using students' inputs to create a large data base with pictures, movies and other works in several supports so that they can explain to others our identity in a easy and pleasant way and to enhance the digital skills ability of students and other educational structures. In bottom line it's about bringing school and community together to embrace the common heritage and serve our culture digitally (in a 21 st century language) to those who visit us or anywhere around the world.	
Context	



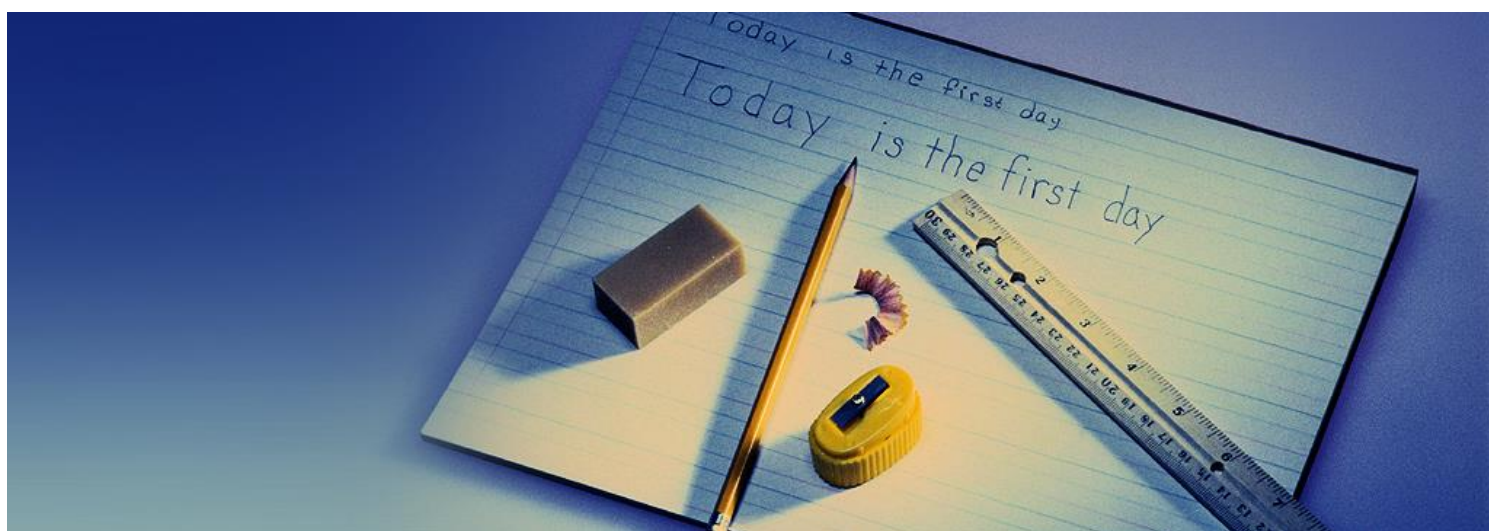


C4

Chapter Four Future Classroom: Students' evaluation system

The assessment is one of the most important tasks for the teachers and students involved in improving their learning and teaching activities. To have a clear, available, immediate information on the learning and teaching activities can make the difference and will allow teachers and students to develop adequate strategies and activities to improve their results and accomplishments.

Using ICT in assessment is one of the clearest advantages of the digital world in its articulation with the educational field. The impact of immediate response, the systematic structure of assessment data gathering and the reduction of the delay on feedback of student's assessment allows all the educational community to participate in the improvement of the educational process.





C.4

The use of new teaching strategies as a result of using diversified technology, in the context of school, resulted in a necessary change in traditional assessment models.

We understand that evaluation in schools is a very important part of learning, and can enhance it.

Greater information and parental approach to student assessment, for enhancing their collaboration in the improvement of educational attainment.



New learning scenarios, new society demand towards school, new language, managing huge amounts of information, the existence of information highways. A new world of innovation and creativity is opened to school and education.

We can change school and education with the help of digital technologies in close interaction with new pedagogical approaches. One of the areas where that interaction knows a clearer and advanced dynamics is the assessment, mainly students' assessment.

The teacher, the student and also the parent can promote positive change or enhance improvement on activities or have a better or a clearer knowledge of the needs, week and strong points of the teaching and learning process, if the time between the assessment instrument application and the obtaining of the results and their dissemination among those who need them is getting shorter or immediate.

Diminishing the gap between the info recollection and the feedback of the results is fundamental to get a better time management of the school work, saving efforts and avoiding to keep wrong or less effective practices during that gap.

The sooner we get the feedback on assessment, the sooner we correct or act on improving. If we can do it in real time, then the effectiveness as won a big step towards a better education.



WITH EVER INCREASING
ACADEMIC STREAMS AND STUDENTS

ASSESSMENT *history,*
past, present and *problems,*
future *good practices*

PAST FUTURE PRESENT

**Future classroom:
Students' Evaluation System**

Examples of Good Practices
- PORTUGAL -

25-29 January 2016

"LA BUONA SCUOLA"
Law July 13th, 2015 n. 107

The purposes of the law can be summarized as follows:

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21st Century European Classrooms
Portugal - Atouguia da Baleia
January 25th-29th 2016

"21st CENTURY EUROPEAN CLASSROOMS"
5th MEETING - ATOUGUIA DA BALEIA

ASSESSMENT and INNOVATIVE TEACHING

Erasmus+

Erasmus+

Assessment of students with Specific Learning Problems

...there is nothing that is more unjust than unfair to equally between unequal"
(Don Lorenzo Milani "Letter to a teacher").

Students' evaluation system

5th meeting
24.01-29.01.2016 Portugal

Erasmus+

Erasmus+

**FUTURE CLASSROOM:
STUDENTS EVALUATION SYSTEM**

21st Century European Classrooms

Student Evaluation Systems
From evaluation to meta-evaluation

Fundação Calouste Gulbenkian
Atouguia da Baleia, Peniche, Portugal
January of 2015

Erasmus+





Chapter 4 – Students' Evaluation Systems

LINKS (Videos and other presentations)

<http://www.21digitalclass.com/partner-presentations-4.html>

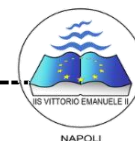
Portugal

<https://www.youtube.com/watch?v=ZRzRAnEYzfY&feature=youtu.be> – VIDEO "Students evaluation in 15 years" (students presentation)



Italy

https://www.youtube.com/watch?v=IYTn_INPb3o&feature=youtu.be – VIDEO "Students evaluation in 15 years" (students presentation)



Poland

<https://www.emaze.com/@AFCOWQOF/students-evaluation> - Teachers presentation (Emaze)

<https://www.youtube.com/watch?v=quzChOy2sOs&feature=youtu.be> – VIDEO "Students evaluation in 15 years" (students presentation)



Bulgaria

<https://prezi.com/smp5zimp2-mf/general-conclusions-of-the-survey/> – teachers presentation 2 - General conclusions on the survey (Prezi)

<https://www.youtube.com/watch?v=2xtTpilgd7Y&feature=youtu.be> – VIDEO "Students evaluation in 15 years" (students presentation)



Spain

<https://www.youtube.com/watch?v=cWgOvXdzbDo&feature=youtu.be> – VIDEO "Students evaluation in 15 years" (students presentation)



Promethean

https://www.youtube.com/watch?v=Ao_G5GbGdPQ – VIDEO: "Erasmus+: 21st Century European Classrooms"

<https://youtu.be/VkMtAwJKkhU?list=PLTTWdUcy0p-6d2zcPWRH9EwB1ZOkHQ4u5> – VIDEO: "Elementary School of Ferrel, Modern Classroom"





Good Practices Description by Partner School

Erasmus+

CHAPTER 4
FUTURE CLASSROOM: STUDENTS' EVALUATION SYSTEM

Assessment and evaluation is an integral part of educational processes. In Poland, the Ministry of National Education published a special directive, which includes the main principles and conditions of assessment and evaluation. The System of Assessment and Evaluation is prepared by every school on based the statutory instrument. In our school, the system is prepared by teachers and next consulted with parents and students' council. This document included all principles of assessment in our school. All teachers and students rights related to assessment of students' knowledge and skills are described in details. Any changes can be brought in only if parents and students give theirs assent to it.

Erasmus+

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Chapter 4: FUTURE CLASSROOM: Students' Evaluation System

Good Practices

- School/Institution**
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN
- Theoretical approach or conceptual guideline**
Structuring axes of our Educational Project:
 - Bilingual Education
 - ICT school
 - Cooperative learning
 - Students level diversity
- Context references pertinent to the main issue**
 - Use of ICT resources in our everyday work
 - Encourage students cooperation
 - Promote a more active learning process
 - Respect the diverse talents and ways of learning
- Good practices identification**
Creative assignments, written tests, multimedia presentations, E-Portfolio, peer and self-evaluation using ICTs and a variety of tools (Google Forms, Drive...)

Erasmus+

21st Century European Classrooms:
Meeting the challenge of the digital era with innovation and creativity

Chapter 4: FUTURE CLASSROOM: Students' evaluation system

1. School/Institution
SOUUE "Konstantin Kiril Filoso" – Ruse, Bulgaria

2. Theoretical approach or conceptual guideline

- Assessment – systematic determination of a subject's merit worth and significance using a set of standards
- Main functions – controlling, feedback, educational and social informative
- Methods of docimology
 - Formal – standardized tests
 - Informal – flashcards and pop quizzes
 - Observation – assessing students' social progress
 - Grading – to score students' performance and individual testing
 - Portfolio – review of our students' progress

3. Context references pertinent to the main issue

- Variety of ICT methods of assessment
- Boost online assessment including multimedia, different question types
- Use of personal response systems
- Use of virtual learning environment to manage assessment

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21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 4
Future Classroom: Students' evaluation system

- School/Institution** Vittorio Emanuele II - Italy
- Theoretical approach or conceptual guideline**
Structuring axes of our education plan:
 - Technology and Communication
 - Citizenship Education
 - Self-Consciousness and Self-Esteem
- Context references pertinent to the main issue**
 - Using several webtools
 - Formative evaluation
 - Promoting students and teachers achievement
 - Creating educational resources.
- Good practices identification by each partner**

4.1. Interactive Grades: On-line Assessment with Socrative (M.C.)
Brief Description
Socrative is an assessment method available for students via their personal smartphone, pc or tablet. Students download the app, where previously

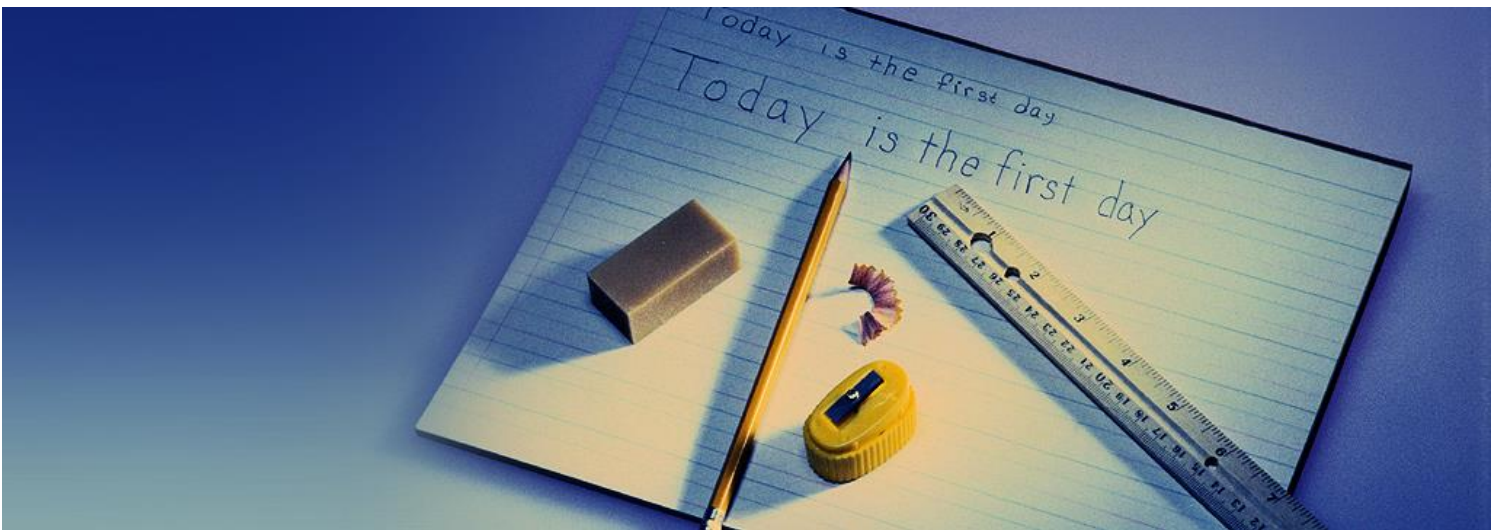
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21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 4: Future classroom: Students' evaluation system

Good Practices

1. School/Institution Agrupamento de Escolas de Atouguia da Baleia - Portugal
2. Theoretical approach or conceptual guideline Structuring axes of our School Educational Project: - Technology and communication - Citizenship Education - Education for the success
3. Context references pertinent to the main issue - Produce educational resources - Use a variety of web tools and devices - Instant feedback and formative evaluation
4. Good practices identification Use of several tools and devices for students' assessment – Students response system (Activ-Expression; Picklers); Game based learning (Kahoot); Inquiry based learning (Peardeck); Interactive lesson delivery system (Classflow); Behaviour management system (Classcharts);
5. Justification (Why it's a good practice?) - The use of new teaching strategies as a result of using diversified technology, in the context of school, resulted in a necessary change in traditional valuation models; - We understand that evaluation in schools is a very important part of learning, and can enhance it; - Redefine strategies according to the results obtained; - Create instant feedback of results; - Allow students to know what they need to improve; - Offer a variety of assessment instruments; - Communication of the student's assessment using different media; - Valuing all the interventions of the students; - Greater information and parental approach to student assessment, for enhancing their collaboration in the improvement of educational attainment; - Promote different skills in students, including the twenty-first century skills;
Context





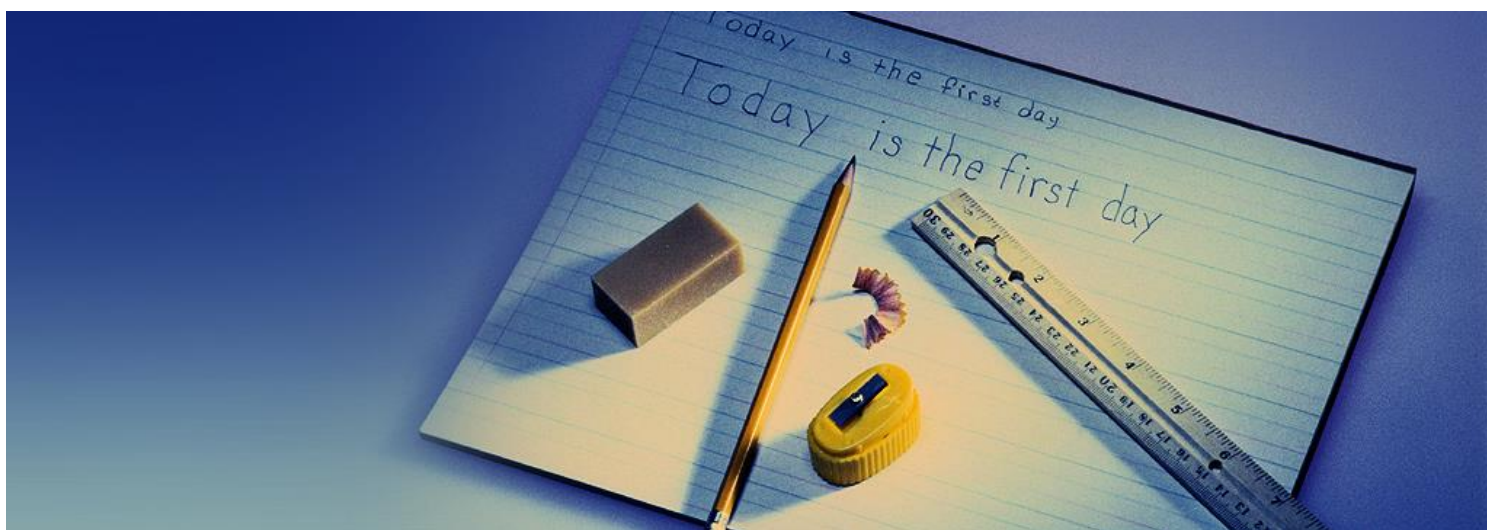
C5

Chapter Five

Digital Literacy on students and teachers;

Digital literacy is emerging in school and education as an important issue to address considering the specific problems raised by the information society. To be able to select information, to determine the accuracy and the reliability of the information at the disposal of a single mouse touch is a task to consider so we can free our school digital users of the dangers/risks and the misuses of the digital tools and information. New need, new possibilities raising ethical issues and new problematics in accessing to knowledge and sensible information.

To grant students and teachers the tools to deal with the digital era positively and take advantage of its potential.





**C.5
New technology represents new challenges for digital literacy. The school is still perfecting the approach ... perhaps we will never end doing so ...**

It's a new universe with a huge need of ethics and committed citizenship. The need of several kinds of approaches on digital literacy brings to surface the "citizenship of the digital era".



One possibility explored is the curricular offer by teachers with ICT competences, on a proficient user dimension, in a technological advanced learning environment and using collaborative pedagogy.

Obviously we must consider the importance of the autonomy in curricular approach, where we must deal with and work on a less ambitious definition: "adequate mobilization of available information and conscientious communication".

Work on digital literacy in an educational environment is speaking of specific actions on teachers training, on strategies for parental cooperation, defining transversal interventions under a perspective of a less technological approach and more literacy reach, working less technical subjects and underline pedagogical and formative issues.



INTERNET LITERACY and E-SAFETY

Erasmus+

DIGITAL LITERACY of students and teachers

"21st CENTURY EUROPEAN CLASSROOMS"
6th MEETING - NAPLES - IIS VITTORIO EMANUELE II

Digital Literacy for e-Citizens

Erasmus+

Erasmus+

21st Century European Classrooms Naples - Italy March 14th-18th 2016

Erasmus+

DIGITAL LITERACY

"...I haven't special talents, I am only passionately curious"
(Albert Einstein).



Dangers of the Internet

Italy Napoli
14-18 March 2016

Digital literacy on students and teachers

6th mobility
Italy - Napoli
14-18th March 2016

Erasmus+

DON'T POST ANY PERSONAL INFORMATION ONLINE

ONLINE PRIVACY

Erasmus+

Digital Literacy on Students and Teachers

Erasmus+

Improving ourselves

THANKS TO INTERNET TOOLS

Erasmus+



Chapter 5 - Digital Literacy

LINKS (Videos and other presentations)

<http://www.21digitalclass.com/partner-presentations-5.html>

Bulgaria

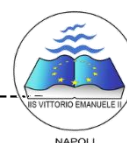
<https://youtu.be/AhT9AhyHVLY> - VIDEO - Digital Leaders Project

<https://youtu.be/bJXHgC84hAU> - VIDEO "Digital Literacy - E-safety" (Students presentation)



Italy

<https://www.youtube.com/watch?v=48mjdJ2IDFo> - VIDEO (Students presentation)



Poland

<https://www.emaze.com/@ACOFQOTQ/digital-literacy-6th> - Teachers presentation (Emaze)



Portugal

<https://plotagon.com/315354> - Students presentation (Plotagon)

<https://app.emaze.com/@ACOCZFTC/digital-literacy-on-students-and-teachers-copy1?hidebuttons&fullscreen> - Teachers presentation (Emaze)



Spain

<https://youtu.be/bTKEE3wT7Hw> - VIDEO "Digital Literacy - Cyberbullying" (Students presentation)

https://youtu.be/rzj_Imrf94s - VIDEO: "Digital Divide! - The use of ICT at school and at home" (Students presentation)

<http://luisama2.edu.glogster.com/digital-literacy-students/> - Students presentation (Glogster)




<https://www.powtoon.com/online-presentation/cRLYyb3VpI8/?mode=movie#/> - Safety Tips - Students presentation (Powtoon)

https://prezi.com/lqxzijiicedh/edit/#114_24309637 - Students presentation (Prezi)





Good Practices Description by Partner School








21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 5: Digital Literacy on Students and Teachers

Good Practices




- School/Institution**
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN
- Theoretical approach or conceptual guideline**
Structuring axes of our Educational Project:
 - Bilingual Education
 - ICT school
 - Cooperative learning
 - Students level diversity
- Context references pertinent to the main issue**
 - Change of traditional information and communication resources by ICTs
 - Provide students with the appropriate skills to use ICTs
 - Provide students information about e-safety
 - Narrow the gap between generations
- Good practices identification**
Information searching tools (Wikipedia, Youtube, ...), collaborative work (Symbaloo, Google Drive...), tools promoting creativity (Prezi, Padlet, Glogster, Powtoon, MovieMaker...), Virtual platforms (Google Classroom)

21st CENTURY EUROPEAN CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

CHAPTER 5
Digital literacy on students and teachers




Digital literacy is a term referred to the knowledge, skills and behaviours used in digital devices. This term is widely discussed by researchers who explore peoples' activities in cyberspace focusing on: "how people find, use, summarize, evaluate, create and communicate information while using digital technologies." Digital literacy includes digital skills, using computers network, the principles of working digital devices and ability to form online communities and social network. Although, there are a lot of definitions of "digital literacy", eight crucial elements are common: cultural, constructive, confidence, critical, cognitive, communicative, creative and civic. As the digital environment is developing and changing all the time, our students have to be prepared to exist and function in the world we don't know today, and we aren't able to predict. But it seems that some skills like using digital tools and devices in a proper way, finding, selecting and creating data, collaborating and understanding social responsibility, ability to critical thinking are crucial and needed in life.

21st Century Classrooms:
Meeting the challenge of the digital era with innovation and creativity

Chapter 5: DIGITAL LITERACY ON STUDENTS AND TEACHERS




- School/Institution**
SOUEE "Konstantin-Kiril Filozof" - Ruse, Bulgaria
- Theoretical approach or conceptual guideline**
Digital literacy is essential for both students and teachers:
 - For students – digital literacy is an essential skill for meeting the challenges of their future occupations and for their development as global citizens of the 21st century
 - For teachers - digital literacy is an essential skill for their professional development and lifelong learning
 The use of digital skills in class is the way to involve students in an active learning process and to bridge the digital divide which exists between the use of ICT inside and outside school.
- Context references pertinent to the main issue**
 - ICT tools application
 - Aiming at overcoming the digital divide between teachers - students, teachers- teachers and students - students when using the ICT tools in the process of teaching and learning
 - Improving language and communicative skills by using technologies in class
 - Digital literacy and being good digital citizens
 - Teaching safer and more responsible use of online technology and mobile phones

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Chapter 5
Future Classroom: Digital Literacy on students and teachers

- School/Institution** Vittorio Emanuele II – Italy
- Theoretical approach or conceptual guideline**
The main elements that enables an individual to be digitally literate are: Cultural, Cognitive, Constructive, Communicative, Confidence, Creative, Critical and Civic.
Structuring axes of our education plan:
 - Technology and Communication
 - Citizenship Education
 - 21st century Skills
 - Awareness and adaptability to change
 - Fight the digital divide
 - Improving languages skills
 - Fostering the access into the labour mark
 - Lifelong learning (specially for teachers)
- Context references pertinent to the main issue**
 - Using several webtools
 - Promoting awareness of the ICT risks and opportunities
 - Bend tools to the effective need
 - Underline the pedagogical use of ICT
 - Discover their own digital identity
 - Read and deduce information from visuals
 - Use digital technology to create a new piece of work or combine existing pieces of work together to make it your own.
 - Successfully navigate in the non-linear medium of digital space and to search, locate, assess and critically evaluate information found on the web such as on-shelf in libraries.

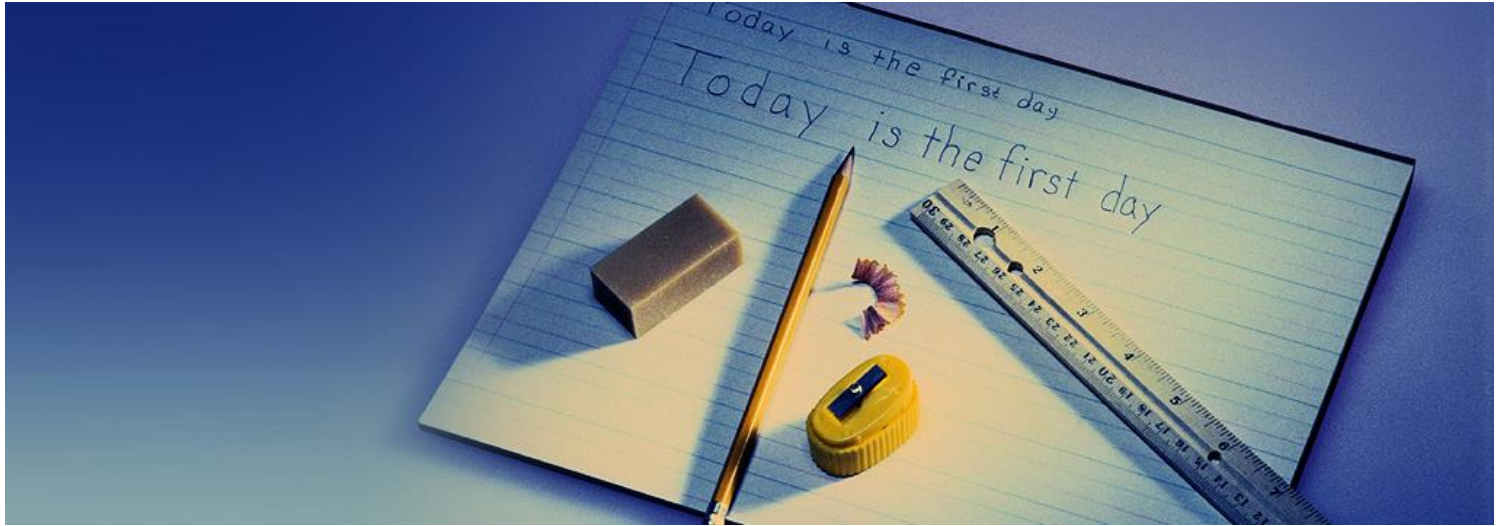




21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 5: Digital Literacy on Teachers and Students

Good Practices

1. School/Institution Agrupamento de Escolas de Abugueira de Baixa - Portugal
2. Theoretical approach or conceptual guideline Structuring axes of our School Educational Project: - Technology and communication - Citizenship Education - Education for the success
3. Context references pertinent to the main issue - Measuring and monitoring literacy skills in the different stages of education; - Operationalizing learning strategies associated with the collaborative work of the school libraries in interaction with the Kindergarten and Primary School Education Teachers, in promoting literacy skills; - Consolidating the teaching-learning process in the development of information literacy, digital literacy and reading literacy skills; - Integrating Digital Literacy in the curriculum as a school subject in 5th grade;
4. Good practices identification - Library Curriculum Project (Currículo da Biblioteca)





C6

Chapter Six

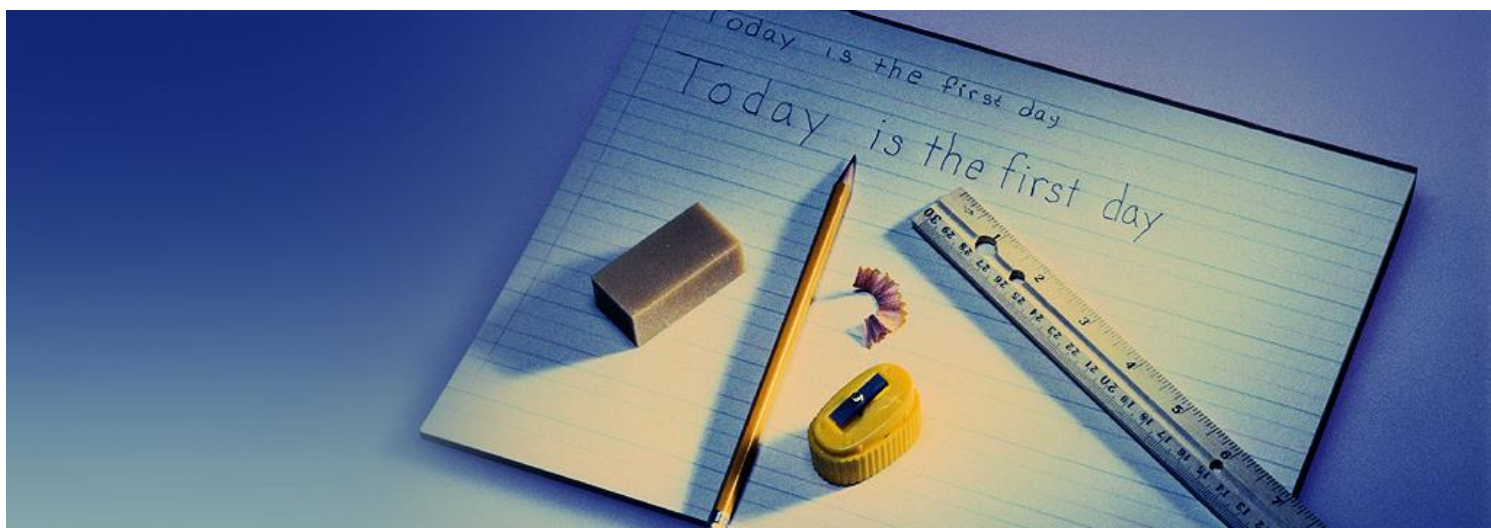
Interactive Pedagogy: the use of educational aimed tools

The recent evolution in the educational digital market, has produced a considerable amount of diverse educational aimed tools in the digital dominium.

However the quality and the huge amount of such tools present a challenge, both for teachers as well as for school management in order to select quality tools and needed ones.

It's very important to salute the investment of stakeholders in the production of software and hardware with educational main purposes. That kind of investment is supported by research and most of the time by a tremendous attention payed to school environment, stakeholders needs (mainly teachers, students, parents), and to the pedagogical issues presented by nowadays educational system.

That's very important the partnership that several schools are establishing with technological companies in order to get more adequate tools responding to the needs of the 21st century school.





C.6

Directing tools aiming educational purposes may drive teachers work easier, or at least enables them the possibility of having, almost surgical strategies and materials to get best results and get classes more effective.

However the importance of digital world tools, used in education and the fact that those who are specifically aimed being more effective than those who are of a generalist kind, it is fundamental to emphasize pedagogy superiority over technological one.

You can be the most traditional teacher with the most traditional and outdated approach to class dynamics using the most advanced digital technology inside classroom. The technology provides a tool, its pedagogy that can enhance the digital domain to get a more effective communication, in line with society expectations from the 21st century school knowledge and competences.

The scenario, the teachers and students role are in constant refoundation in a large number of schools and countries nowadays.

When you use digital technology you have to keep in mind that this use is just not enough to get better results and to drive change to your class by itself. You need to keep in mind, that change goes deeper and that educational strategies go far more in pedagogical thinking than just in tools.

That being said, you always have some difficulty in staying updated towards the technological dynamics and you always need good amounts of training and sharing information in diverse issues, such as: assessment, communication, devices, etc.

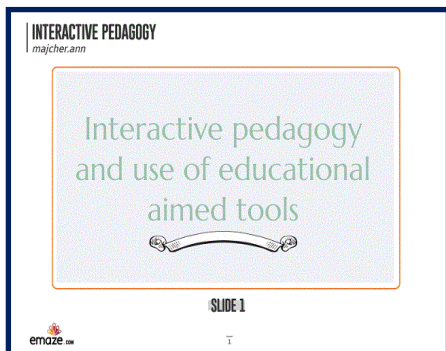




Chapter 6 – Interactive Pedagogy

LINKS (Videos and other presentations)

<http://www.21digitalclass.com/partner-presentations-6.html>



Poland

<https://www.youtube.com/watch?v=2WaVwy158kw&feature=youtu.be> – Teachers presentation (VIDEO)

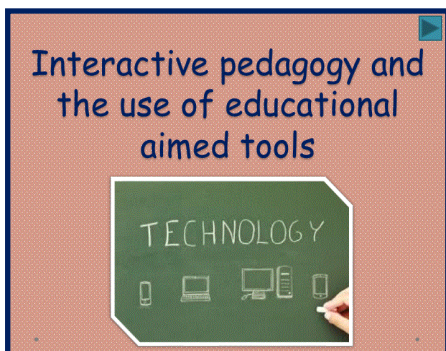
<https://www.emaze.com/@ACWIOZIC/interactive-pedagogy> - Teachers presentation (Emaze)

https://prezi.com/owcd35inhg_z/our-erasmus/ - Students presentation (Prezi)



Bulgaria

<https://www.youtube.com/watch?v=-LsDXP8tOaU> – Teachers presentation (VIDEO)



Spain

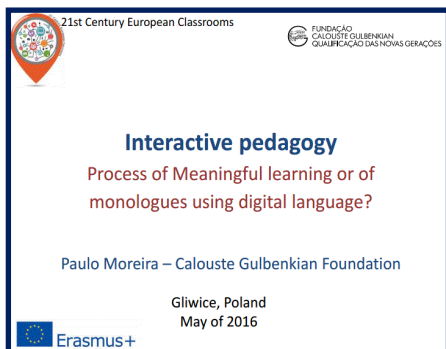
https://prezi.com/g6u1t01hlykl/travel-of-poland/?utm_campaign=share&utm_medium=copy – Students presentation (Prezi)



Portugal

<https://www.youtube.com/watch?v=zCUKiB81Ws8&feature=youtu.be> – Teachers presentation (VIDEO)

<https://www.youtube.com/watch?v=Xgfe4lc8wxY&feature=youtu.be> – VIDEO: "Feedback in one word" (Students presentation)



Italy

https://www.youtube.com/watch?v=O9_obfoU6WM&feature=youtu.be – Teachers presentation (VIDEO)

<https://www.youtube.com/watch?v=7XRaW9YbbnE&feature=youtu.be> - Students presentation (VIDEO)





Good Practices Description by Partner School

21st CENTURY CLASSROOMS:
Meeting the challenge of the digital era with innovation and creativity

Chapter 6: INTERACTIVE PEDAGOGY: The Use of Educational Aimed Tools.

Good Practices

- School/Institution**
IES LAS BANDERAS- EL PUERTO DE SANTA MARÍA- SPAIN
- Theoretical approach or conceptual guideline**
Structuring axes of our Educational Project:
 - Bilingual Education
 - ICT school
 - Cooperative Learning
 - Students level diversity
- Context references pertinent to the main issue**
 - Use of ICT resources in our everyday work
 - Encourage students cooperation
 - Promote a more active learning process
 - Respect the diverse talents and ways of learning
 - Increase students motivation to study and work
- Good practices identification**
Internet tools, Google Classroom, different multimedia tools (Moviefaker...), interactive maps, Symboloo, Google Drive...

CHAPTER 6
INTERACTIVE PEDAGOGY and USE of EDUCATIONAL AIMED TOOLS

Using interactive tools in teaching processes is becoming the integral part of teaching in the modern world. Living in the digital era makes teaching more interesting and more involving. Teachers who are aware of their role in the modern school and able to accept new challenges, change their methods of teaching, search new ideas, new tools to reach better results in their work, to educate new generation according to a new concept of teaching and learning processes. In the past, interactive pedagogy referred to process of communication between people nowadays, this terms is used to describe the process of teaching and learning in which the interactive tools are adopted by teachers to transform the teacher- centered approach to student- centered approach and engage as well as motivate students to active learning based on collaborative work and exchanging information. It is very crucial for teachers to use the different tools for different purpose. The diversity of the digital tools give the teachers opportunity to choose the best ones to reach the specific aim, but on the other hand, can cause problems with making decisions. The training and practicing seem to be the best solution. The more experienced teachers are able to use the better educational tools.

At the beginning of the project in our school only few teachers use digital tools, creating lessons by their own. After almost two year, the number of teachers teaching with interactive tools and the diversity of tools used in our school increased considerably.

21st Century Classrooms:
Meeting the challenge of the digital era with innovation and creativity

Chapter 6
Interactive Pedagogy: the use of educational aimed tools

- School/Institution**
SOUEE "Konstantin Kiril Filozof" – Ruse, Bulgaria
- Theoretical approach or conceptual guideline**
 - Interactive pedagogy is not about ICT only and about the interaction between computers and people.
 - Interactive pedagogy is about sharing information, role play, drama, music – the students may not remember the lesson plan but they will remember the experience.
 - Interactive pedagogy allows the teacher to be a facilitator while the students explore various information sources and try to analyze the information.
 - The virtual world and games have their important role in the teaching/learning process. The students do not watch video passively but they think and play, try and fail and try again.

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 6
Future Classroom: Interactive Pedagogy – the use of educational aimed tools

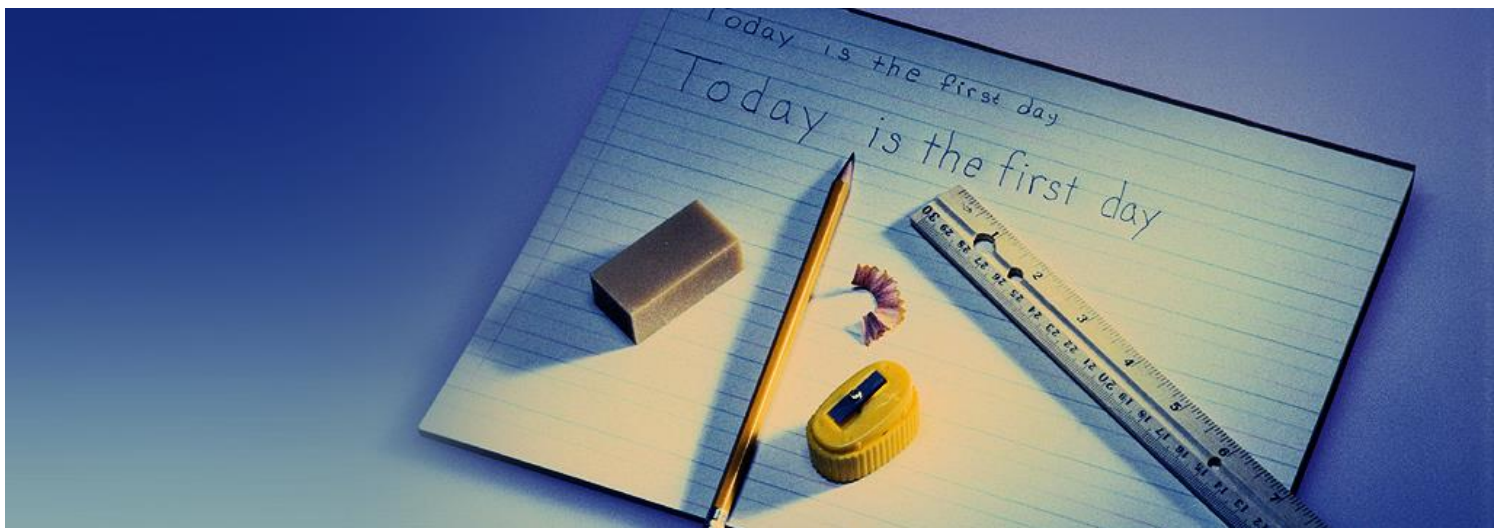
- School/Institution** Vittorio Emanuele II - Italy
- Theoretical approach or conceptual guideline**
The main strategy of modern education should focus on the student's independent activity, the organization of self-learning environments and experimental and practical training, where students have a choice of actions and can use initiative.
 - 21st century Skills
 - Awareness and adaptability to change
 - Collaborative Learning
 - Fostering the access into the labour mark
 - Foreign Languages skills
 - Lifelong learning
 - Technology and communication
- Context references pertinent to the main issue**
 - Using PBL pedagogical approaches
 - Make students active participants of the training course, from the early stages of its implementation;
 - Make students co-designers of learning actions and plans;
 - Underline the pedagogical use of ICT
 - Adopting Innovative Learning Strategies

21st CENTURY CLASSROOMS:
meeting the challenge of the digital era with innovation and creativity

Chapter 6: Interactive Pedagogy: the use of educational aimed tools

Good Practices

- School/Institution**
Agrupamento de Escolas de Atouguia da Baleia - Portugal
- Theoretical approach or conceptual guideline**
Structuring axes of our School Educational Project:
 - Technology and communication
 - Citizenship Education
 - Education for the success
- Context references pertinent to the main issue**
 - Use educational aimed tools in the classroom
 - Promote students' collaborative work
 - Create innovation and increase creativity
 - Promote a more interactive learning process
- Good practices identification**
Use of several interactive tools in the classroom – use of augmented reality in textbooks (Aurasma), use of interactive tools in oral presentations (Thinglink, H5py), whole class interaction through devices, real time evaluation and instant feedback (Classflow); promotion of collaborative work among students (Padlet; Classflow; ActivTable; ActivPanel); sharing knowledge and discussing work (ActivTable; ActivPanel); Evaluation using student response systems (Classflow; Activinspire/ActivExpressions; Kahoot); Game based learning (Kahoot); Interactive lesson delivery system (Classflow); promotion of creativity and storytelling (MineCraft); improving skills and building 3D models (3D Printer software and Sketchup).





D

Other Materials Available

The partnership developed in this project has produced a big amount of materials that we intend to make available to all and to share, hoping that they may help or inspire others to invest in the use of digital technology to get closer to the 21st century classroom scenario.



Chapter 1 – Creativity and innovation (Blackburn, the UK)

<http://www.21digitalclass.com/resources-and-tools-1.html>
Other resources and tools

Chapter 2 - Effective communication (Ruse, Bulgaria)

<http://www.21digitalclass.com/resources-and-tools-2.html>
Other resources and tools

Chapter 3 – Internet and web tools (Puerto de Santa Maria, Spain)

<http://www.21digitalclass.com/resources-and-tools-3.html>
Other resources and tools

Chapter 4 – Students' evaluation (Atouguia da Baleia, Portugal)

<http://www.21digitalclass.com/resources-and-tools-4.html>
Other resources and tools

Chapter 5 – Digital Literacy (Naples, Italy)

<http://www.21digitalclass.com/resources-and-tools-5.html>
Other resources and tools

Chapter 6 – Interactive Pedagogy (Knurów, Poland)

<http://www.21digitalclass.com/resources-and-tools-6.html>
Other resources and tools

Dissemination Seminar (Lisbon, Portugal)

<http://www.21digitalclass.com/partner-presentations.html>
Presentations

<https://livestream.com/accounts/11111979/events/5756985>

Conference "Education in the Digital Era"

To all who made possible the production of this notebook, by participating in this project activities on behalf of all the schools and other partners involved we wish to thank them for their commitment, their cooperation and their availability.

Students
Teachers
Technicians
Parents
Stakeholders
Institutions
And communities involved
on behalf of our project...

Thank You All





Erasmus+

ICT in Education

A good practice notebook

This is a subject and a document that's never even near a conclusion. This is a document aimed to help, to share some good practices. We need to have more testimonials, more good practices coming to make this notebook richer. This is an ongoing document, constantly built by those who want to share their experience to accomplish a better classroom in the world, facing the challenges of the 21st century with innovation and creativity.

