VIP 2018 CONFERENCE – PRETASK (PEDAGOGICAL INNOVATIONS)

1. AUSTRIA - RG19 Vienna

Innovative Projects:

- Modular System NOVI (http://www.brg19.at/public.php/20/index)
- Bilingual classes in every form (http://www.brg19.at/public.php/17/index)
- Team-teaching in almost all subjects
- Young Science Cooperation Partner (http://www.brg19.at/public.php/60/1057)
- Sparkling Science Projects (http://www.brg19.at/public.php/59/938)
- Cooperation with the University of Vienna
- Cooperation with the University of Applied Sciences
- Unesco Associated School (http://www.brg19.at/public.php/59/913)
- Merry Charity (http://www.brg19.at/public.php/58/980)
- Erasmus+

Examples:

- NOVI → interdisciplinary modules (i.e. history + biology,...)
http://www.brg19.at/public.php/20/index

- Unterstufe + Projects, Workshops,...
→Social learning
→Inspire Creativity
→Multilingualism / Language Diversity
→ Natural Sciences
http://www.brg19.at/public.php/19/811
http://www.brg19.at/public.php/52/887
http://www.brg19.at/public.php/53/1035
http://www.brg19.at/public.php/54/1028
http://www.brg19.at/public.php/54/905

- Sparkling Science Project in Costa Rica
→www.dib.boku.ac.at/institut-fuer-botanik-botany/projekte/neuer-regenwald

- DAF/DAZ → Language Education (German as a second language)
→see presentation HTC2016
→http://www.brg19.at/public.php/22/945

- Training courses for students from age 16-18 → (Rhetorics, Time Management, ILB...)

- Regular field trips apart of student education
→http://www.brg19.at/public.php/21/642
→http://www.brg19.at/public.php/45/733
→http://www.brg19.at/public.php/45/265

2. BELGIUM (VL) – Oscar Romero College Dendermonde

ÓSCAR ROMERO COLLEGE
samen bouwen aan je toekomst

School innovation

Óscar Romerocollege Dendermonde (Belgium)

CLIL

CLIL

Content and Language Integrated Learning

Students follow a subject like history or geography in a foreign language.

STEM

STEM

- Science – Technology – Engineering – Mathematics
- Problem solving learning
- Science projects

CO-TEACHING

CO-TEACHING

Two teachers teach one group at the same time.

Lower years professional courses

1 + 1 = 3!

Subject campus

Subject campus

Classical Belgian system:

ASO (university) | TSO (bachelor) | BSO (job)

All students are at separate schools.

Our school: a mixture of ASO, TSO and BSO students and campusses structured according to subject fields like Languages and Sciences, Economics and IT, Engineering and Technics, Social Sciences, and so on.

Seminars

Seminars

Students from the last two years can choose a seminar.

Possible subjects: cooking, sewing, first aid, photography, Spanish, programming, game development, marketing, theatre, creative writing, rescue swimming, and so on.

Stress on project learning and peer evaluation.

Plus Project

Plus Project

Target group: Highly-gifted children in the lower years

Plus Project: Replacing one or two hours per week from the normal curriculum by a course from the higher years

Blended learning

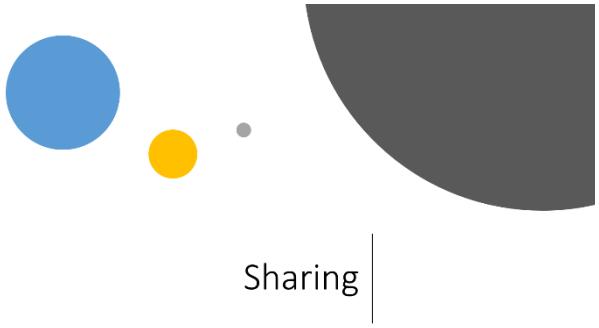
Blended learning

A mixture of classical classroom teaching and independent learning in the IT rooms.

Digital learning platforms on Blackboard

E.g. Dutch: one hour per week in the IT room with a Blackboard platform

Increases motivation and student involvement



3. BELGIUM (WAL) – Institut de la Providence Champion (Namur)

1. "Project" classes in 2R > Those classes introduce the "flexible class" concept and follow project-based learning. The courses are integrated into innovative projects where students acquire knowledge by answering complex questions and solving real-life problems. Teachers have one hour every week to meet and coordinate the projects. A "flexible" class is a class that offers different spatial arrangements instead of traditional rows of benches.

2. "CreativeLab" classes in 2R > The aim is to help students in their motivation and entrepreneurial spirit. 2 classes of 24 pupils are shared by 7 teachers (5 of whom volunteered!) for 2 hours a week to offer an open-ended teaching method for student's creative projects.

3. "STEM" class in 3R > 26 students were selected on the basis of a motivation letter to be part of the "STEM (Science Technology Engineering Maths)" class. They have 5h of science plus 2h of "STEM" per week where 3 teachers (Computer Science / Math / Science) accompany them to develop their projects, all linked with STEM.

4. "Reverse Math" class in 3R > Reverse pedagogy let the students study the theoretical part by watching small video podcasts at home (with an online questionnaire). The exercises are always done in the classroom. According to the pupils' answers to the online questionnaire, the teacher adjusts the theory and leaves more space during the lessons for the exercises and specific questions by developing the collaborative work between students, or by forming groups according to their levels.

5. Emotion management within classes > In some classes, students have the opportunity to inform their teacher about their emotions of the moment, through emoticons at their disposal that they stick on their bench at the beginning of the lesson. The benches are usually placed in islands allowing a better collaboration between students.

6. New Collaborative Concepts Following Work by the Professional Learning Community > Launched in September 2016, the "PLC" currently involve more than 40 professors. Teachers meet on a voluntary basis 1h a week (common free hour in the schedule) to discuss their professional practice and share their experiences. One of the main objectives that must be reached is to work for an improvement of school performance, by the development of innovative methods. Here are some examples: collaboration between teachers of different levels that sometimes give lessons together; the exchange of classes between teachers for an educational activity; changing the layout of the tables to islands; creating a virtual portfolio; ...

7. Introduction of neuroscience in student support > Based on the neuro-cognitive and behavioral approach of Jacques FRADIN ("approche neurocognitive et comportementale" in French), we offer personalized support to our students allowing them to identify their "temperaments" (typology defined by this theory) and help them find new ways to develop their motivation. Teachers are increasingly taking into account the temperament of students to vary their approach with their students.

4. DENMARK – Bagsvsærd Gymnasium Copenhague

At the academy of Bagsværd College the following teaching types have been successfully incorporated into the everyday life of the school.

1. a five-year gymnasium program (where the norm is 3 years in DK).
Starting in the 8th grade (out of 9 - though there is a class zero as well for the youngest children) the kids choose to attend school at the 5-year program. They can choose between:
1. Biotechnology
2. Computer science
3. Cultural Science (called Global)
The kids will then stay in the same class from 8th to 12th grade, possibly forming even tighter bonds to their peers, but also to the teachers, whom they have through the 5-year program.

2. Formative Feedback: as much research point toward the positive usage of formative feedback over summative (comments on the process instead of a grade of the product) this have been incorporated in the classrooms, in a way where the students often only receive grades 3 times a year (in rough translation would this be standpoint grades). Thus is the comparison aspect between the students often eliminated. Though stronger students will eventually want to be confirmed in their success, the weaker students are often happy to forego a grade. Understandably, while it can isolate the weaker individuals.

3. Which direction for the next three years? That is no longer an issue, before you attend gymnasium in DK. The first 3 months the students don't have to choose their desired path for the next few years - and instead they are put in totally random classes, and will not have to decide before later on. This gives them a better understanding of the subject, which can be quite different from upper secondary school to gymnasium, before they chose their direction (either science, social sciences, humanities or musically directed)

4. The teachers of Bagsværd strive toward more creative teaching methods. While every child (in DK) nowadays have an iPhone/smartphone and/or a computer, recording and making videos to use in the classroom setting is often applied. - so instead of always banning their use of the phones, we reverse it, and make sure they use it for documentation of process

5. In sciences we have incorporated a very high degree of the 5e-model, where the students have to figure out how to apply certain theoretic concepts and then design their own experiments – of course under guidance and questioning from the teacher. This is instead of the traditional "cookbook method", which research have shown only works to a low degree. The 5E model if in DK translated to the 6F model, and due to the F's the 6th step incorporated is feedback. This could be feedback to the students, from the students to the teacher (although unbeknownst to the student most often) to show the teacher which aspect the student has understood or have missed.

5. FINLAND – Schildtin Lukio Jyväskylä

Pretask Finland

Integration courses

Integration

- a holistic approach
- a deeper insight into the subjects
- increases teacher´s knowledge on student learning
- common goal for both the teachers and student teams- sharing expertise and core competencies

No pain, no gain – what is needed...

Teacher team

- cross-curricular planning
- collaboration with the colleague
- change in the culture? teachers have traditionally worked more on their own subjects than together with their peers in school

Teaching – coaching?

- teaching responsibility and soft skills
- individual learning paths in teams (differentiation)
- emphasis on cross-cutting topics, phenomenon-based learning and exploratory learning
- more time to support special needs

Integrated lesson

- Students work in teams of four (25-30 students in a group)
- Two (or more) teachers
- Each team sets their goals (differentiation, individual learning paths)
- Motivation, support, responsibility enhanced in the team
- Self-assessment, peer assessment, teacher assessment (metacognition --> learning to learn)
- Tools: e-learning, different learning platforms

Examples of integration courses

Course 3: English & Finnish Literature and Culture:

- examples of team work: ***drama workshop*** on Shakespearean themes (modernized versions), **comparative analysis on dystopia**n literature (Finnish/English) and films, **recorded group discussions/debates/role plays** on cultural issues

Course 4: Society and media

- examples of team work: ***effective speeches*** in Finnish/English (cultural differences), ***media analysis*** (news, social media), ***debates*** based on ***interactive documentaries*** about current social issues

Evaluation

- Substance knowledge on both subjects
- The success of the team
- The success of the individual in the team
  --> continuous self assessment, peer assessment, teacher assessment
- Both the team work and individual work are evaluated.

6. FRANCE – Institution Saint-Jude Armentières

We have some educational innovations but not enough because in France there are major reforms in college and high school and the teachers are very busy with that. Teachers work a lot on assessing students' skills for example.

There is some innovation with classroom use of tablets that can replace books and notebooks. This is used in mathematics, science, physical education. We use some apps on the tablets to make the lessons more interactive. The students can be more creative with that tool.

The second innovation is a work that we started in a pedagogical meeting on neuroscience and multiple intelligences. This is used by several teachers in their lessons (sciences, arts, music), and also for interdisciplinary projects. It is also very used by teachers to work on student orientation, to know their tastes and skills and to be able to choose what they want and what they can do

7. GERMANY – Wittekind Gymnasium Lübbecke

Our school has not implemented any explicitly innovative or new teaching methods lately – but nevertheless our teaching methods might seem innovative to colleagues from abroad:

- group work is something that has become very common for us – which is why we do not consider it to be innovative. In some classes we even always have extra tables for students working in groups or teams. For some classes we have an extra room (right next to it) in which 3-4 groups can work by themselves at the provided group tables.
- In some classes the 'fast' students are used to going to the extra tables once they have finished their (written) assignment and then continue working there with the next student(s) who join them – thus ensuring that students work together at the same pace (individual advancement) and that students who have already finished cannot distract others but continue working
- presentations: in many classes the students do research in a certain topic and afterwards present their knowledge to the rest of the class (learning by teaching)

8. GREECE – Second Lyceum of Kalamaria

In recent years our school is focused in STEM education, in order to promote and support innovative pedagogic models in science, technology, engineering and mathematics (STEM). Our aim is to encourage collaboration among our students and help to develop a broad mix of skills. We also explore new ways to improve students' learning outcomes, including development of higher-order thinking skills, and to expand the range of learning opportunities made available to students.
We believe that collaboration, especially international collaboration, can be an effective mean to foster knowledge flows, new ideas and peer learning.
All students that joined groups and participated in our STEM projects had a remarkable improvement to their grades in STEM subjects such as Physics, Maths, Informatics and Technology.

Project Hydrobot
Hydrobot, a simple version of MIT's SeaPerch program, is a remote controlled vehicle (ROV) that students construct using simple materials and tools. The aim is to explore aquatic environments, take measurements (temperature, pressure/depth, brightness etc) and collect samples using additional devices.
Students use a kit to build the Hydrobot vehicle and design an electronic circuit using Arduino microprocessor, sensors and other electronic elements. They also write a code creating a program that stores the measurements from the underwater environment. Afterwards they put Hydrobot into the sea and they collect all the data. At the end they can process the stored data to find information about water's quality (clarity, possible eutrophication, pollution level).
Students work in groups, they collaborate, explore and learn by acting and doing.
The results of Hydrobot project were presented with great success by our students in "8th Informatics & Computer Science Students' Conference – Thessaloniki, Greece". 2 **2nd Lyceum of Kalamaria – STEM Projects**

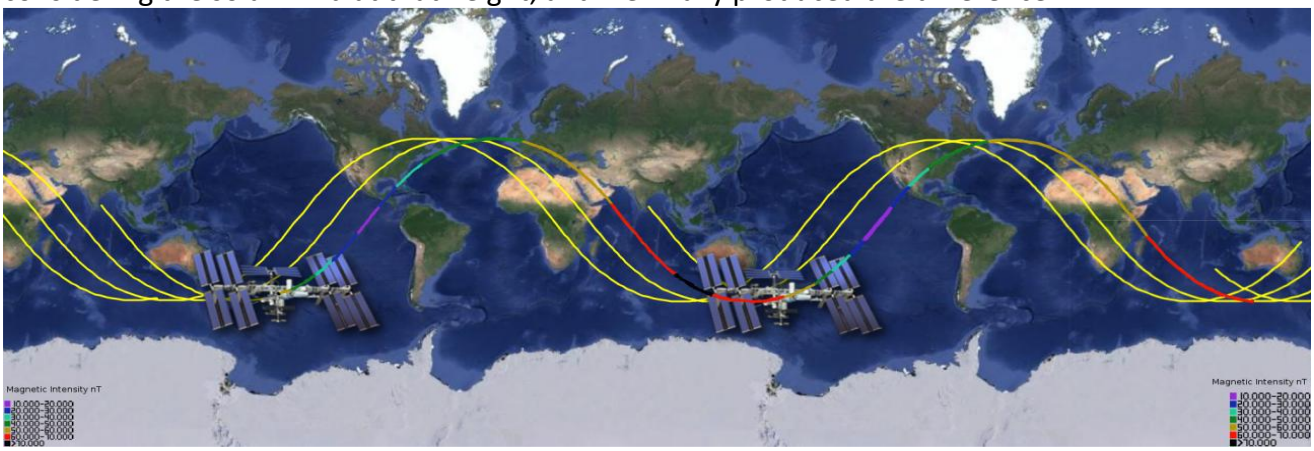
Project F1 in Schools
"F1 in Schools" is a project that uses learning by acting and doing method to enrich students' cognitive level in Sciences, Maths, Engineering, Computer Science combining Arts (STEAM). Students develop useful social and employability skills (according to F1 in Schools Employability Skills Chart) and they become innovative entrepreneurs meeting motor sports standards.

Most important is that have fun and we learn how to:
- develop social skills
- work in groups
- plan a research
- design and implement actions (business) plan
- manage projects
- design and built using eco materials
- use marketing and product's promotion through entrepreneurship
- find sponsors
- collaborate with stakeholders from different business and industries
- work with research institutes and universities

19 students formed 5 groups for creation, design, construction, marketing and racing
First we had to design the logo of our team. Then we used a 3D design program to create all the parts of our single-seater auto racing car 3 **2nd Lyceum of Kalamaria – STEM Projects**

We also had to run virtual tests measuring the aerodynamics
Then we had to cut the polyurethane to form the main body, paint the parts and assemble our single-seater auto racing car
Marketing Group
Our Marketing group searched for sponsors and scheduled the meetings with Thessaloniki's University F1 racing team.
Racing team
Our racing team participated in North Greece's preliminary races of "F1 in Schools" Competition in Serres Motorway during April of 2018. 4 **2nd Lyceum of Kalamaria – STEM Projects**

Project Astro Pi– Mission Space Lab Competition
The European Astro Pi Challenge is an ESA (European Space Agency) Education project run in collaboration with the Raspberry Pi Foundation. It offers young people the amazing opportunity to conduct scientific investigations in space by writing computer programs that run on Raspberry Pi computers aboard the International Space Station (ISS). Mission Space Lab gives them the chance to team up and write a computer program for a scientific experiment. The best experiments will be deployed to the ISS, and will run on an Astro Pi computer there. Then the teams will have the opportunity to analyze and report on their results. The ten teams with the best reports will be selected to win an exclusive prize!
Our intention was to explore earth's magnetic field at the altitude of ISS orbit and to determine how we can calculate orientation. It's a quite interesting task because many animals, birds and fishes are using earth's magnetic field to orientate themselves. Furthermore, measurements at this height give us the opportunity to test models of Earth's field which is measured since 15th century.
Our students created a code that ran in space for 3 hours (two orbits of ISS) and stored approximately 900.000 samples (8-9 in a second) of all three magnetic field components mag_x, mag_y and mag_z, along with the intensity of the field. Then, they had the chance to calculate the mean value of the earth's magnetic intensity and therefore, reduce any errors in measurements. There was a huge amount of measurements collected from space and that was a processing disadvantage. Knowing the path ISS has been through, we produced a heat map with color code along the path. Then, we calculated magnetic intensity using International Geomagnetic Reference Field (IGRF) model, considering the solar wind at that height, and we finally produced the difference.



Reading the heat map from the picture, we can figure that most of the path the ISS is being through, is complied with IGRF model expected. The picture includes two orbits and the black path includes a passing near South Pole where the magnetic field is stronger. Violet strip includes a passing over Earth's Equator where earth's magnetic field is weaker. All other strips have colors indicating measurements in between the theoretical values.

9. HUNGARY – Móricz Zsigmond Gimnázium Tiszakécske

10. ITALY – Liceo B.Rambaldi - L. Valeriani Imola

Our school is a member of an Erasmus+ project partnership called E@News formed by 7 secondary schools from 7 different countries (Czech Republic, Norway, Netherlands, Germany, Republic of Ireland, Turkey and Italy). The students and teachers collaborate on Twinspace with the aim of getting to know each other, exchanging useful information, developing professional skills and, finally, creating a European magazine. The schools (whose members have been working with each other for 20 years) started collaborating on this specific project in 2017. The teachers involved in the project first met in the Netherlands in November 2017 and are meeting again in the Czech Republic in November 2018 to organize the work to be done and to attend lectures and workshops from media professionals in the field of visual and audio media and new communicational strategies, to pass on to the students back at home.

The students have been working on Twinspace since October 2017. The main steps of their work are the following:

- personal presentations / interviews – the students either write an article about themselves or they interview each other, and publish the outcome on the eTwinning site for the other partner schools to read and stimulate communication between them and their peers;
- the students learn how to use the eTwinning website and Twinspace, read the articles written by their peers from the partner schools and they may start writing to each other;
- national articles / videos – the methodology acquired is disseminated among the students by the teacher attending the conferences in the Netherlands and the Czech Republic; the students use the information to write articles and produce videos about national topics, involving sports, important people in the local community, the environment, cultural events, entrepreneurship and school issues; the results are published on the e-Twinning website;
- international reports – in each partner country, the students are divided into groups and each group reads the articles on one of the topics and compare and create an international report; the outcome can be an oral presentation, a PowerPoint presentation or a poster which is then presented to peers in other classes.

In order to fulfil their tasks the students have used different media and techniques, such as the I. T., the Internet, different computer programs (e. g. PowerPoint, Prezi), video editing, interviews and newspaper articles, drawing, etc. They have also attended lessons on Geography (CLIL) and made researches thanks to which they have been able to learn about their partners' countries. Also, the teachers have used the I. T. (PowerPoint presentations on the IWB, the Internet, Webquests, YouTube videos and online newspapers), the flipped classroom and other new methodologies in order to improve their students' learning.

In April 2018 some students and teachers met in Norway as ambassadors of their countries. There they attended seminars on media ethics, the media's role in modern society and media production and workshops on creative and innovative writing and video production. They also visited media companies and organizations. This has improved the quality of the students' products, which were then posted on eTwinning in the form of articles and videos.

In March 2019 our school will be hosting the final meeting of teachers and students where, along with attending workshops, lectures and visits to media companies and organizations, the students, divided in mixed groups, will discuss some given topics and create international media products which will be assembled in one document, an international newspaper or magazine, which will be published on Twinspace.

11. LUXEMBOURG – Lycée Hubert Clement Esch

The most important pedagogical innovations in our schools in recent years aiming to improve teaching and learning can be resumed very easily:

*in lower grades we use a time-out program for disturbing students to keep a calm and learn friendly ambience in our classrooms.
*we have a "classe de motivation" and a "classe d'accompagnement", also from 7th to 9th grade, where students can be transferred to from their class for maximum 3 or12 weeks. in a small group they shall find back to a positive approach to learning.
*all beginners (7th grade) get an IT training in the first year for to get familiar with computers and office 365. this training shall be deepened and extended to 3 years in the future.

12. LUXEMBOURG – Lycée Michel Rodange Luxembourg Ville

Innovative teaching and learning methods at LMRL

Plan de développement scolaire (PDS) = school developing plan
Focus on Autonomy ; Communication and Wellbeing as major aims of modern school education at LMRL

Autonomy:

New methods of evaluation

- **We introduced (= demonstrated and recommended in teachers training session) an innovative method of evaluation: EPPC – evaluation par contrat de confiance**
  - The students receive a detailed description of what they have to study for an exam 1 week in advance.
  - They get a list with exercises that were explained and corrected in class before.
  - ¾ of the exam marks are based on those very exercises, ¼ deal with similar i.e. “transfer”tasks.
  -
- **We foster alternative approaches to teacher-centered teaching methods such as :**
  - interdisciplinary projects,
  - “flipped classroom”
  - learning in stops
  - …

- **We encourage our students to engage themselves in extracurricular activities, project work and charity.**

Digit@lmrl

In 2017, we launched the digit@lmrl project being convinced that technology is more than entertainment only, but should be designed to ameliorate the students' learning process.

- mature pedagogical concept how to use modern media in the classroom.
- educating students to global citizens as well as to motivate them by integrating the digital world into their daily learning environment in a natural, sensible and useful way.
- students are enabled to use technologies for their future: they can find information and create new contents themselves.
- these skills will definitely ease the young people's access to the labour market.
- 10 Ipad classes (in the years 7, 9, 10, 11, 12) working with this method and we are going to add up to this number**.**
- sociostructural approach
- digital platforms and hardware (tablets / Ipads) for specialized classes first, later on for all students
- regular, specialised teachers trainings
- independent learning
- systematic usage of office365
- modern and efficient teaching
- trained staff
- team of expert teachers (steering committee) offering trainings and support plus involvement of external experts

Erasmus+ projects YEL/HOPE

YOUNG EUROPEAN LEADERS

HOPE

Debating clubs

- new roles for teachers and students: teachers as coaches rather than "instructors", students take over more responsibilities
- alternatives to classical subject learning

13. NETHERLANDS – Strabrecht College Geldrop

14. POLAND – 1st Liceum Ogolnoksztalcace Torun

In profiled classes, cooperation with various types of institutions is established, so that young people can experience a more practical aspect of individual professions, e.g. court visits (humanities), participation in lectures and workshops at mathematics and information faculties of the Nicolaus Copernicus University (classes with extended maths and IT), trips to radio and television studios (media classes), visits to theatres and art galleries (art classes).

Encouraging students to participate in various types of charity campaigns: annual blood donation, gathering food and volunteer visits in animal shelters, Christmas packages for orphanages in Toruń, Foodsharing idea (after official celebrations - food packed and delivered to foodsharing points in the city centre).

Numerous extra curriculum clubs developing students' talents and interests, e.g. theatre club, editorial club of the school newsletter, tailoring group, media club.

Project work on foreign language lessons - preparation of presentations and projects by students on the issues of English-speaking countries.

Individualization of the teaching process, e.g. working with a gifted student, implementing individual educational programs depending on the groups' needs.

Cooperation between the teachers and the principal in the selection of topics for training councils and workshops for teachers (training topics adapted to the current needs of the students and the staff).

Annual workshops FRIS (https://fris.pl/en) for students (analyzing thinking styles and styles of activities) combined with the subject of vocational counselling.

A very extensive school website activating a large group of students and teachers - fast information flow, wide promotion of school.

Numerous events promoting and encouraging students to sports activities, e.g. additional extracurricular classes, "Bieg Kopernikański" annual run race , winter ski camp, day of sport for the ILO community.

Cooperation of teachers of various subjects in the organization of foreign trips, e.g. geography / biology and foreign languages
MUN conferences, ToMUN, student exchange with a high school from our sister city Philadelphia, PA, USA.

HOPE - Erasmus+ project performed by I LO in cooperation with schools from Luxembourg, Germany, Spain, Slovakia

15. PORTUGAL – Escola Sec. F. Rodrigues Lobo Leiria

Our school is quite well equipped with ICT facilities and that has been changing the classroom dynamics over the last years. There are computer rooms for specific subjects and each classroom is equipped with a computer on the teacher's desk connected to a projector. Some classrooms also have interactive boards. This equipment, with the constant access to both the internet and the school's intranet, provides the classroom with a series of materials not available before within a more traditional framework. This way, the teaching and the learning processes are ever more alive and interesting for the teachers and the students involved. Furthermore, the students can more easily be guided to search for knowledge more independently.

On the level of the important pedagogical innovations that have contributed to improve collaboration among teachers and students the use of the school's intranet, emailing and the sharing of documents and files via Google Drive and Dropbox are now part of the school's daily life.

16. SLOVAKIA – Gymnázium bilingválne Žilina

In order to help our students get better results we offer them the following activities to participate in:

- various projects and competitions (EP conferences, model UN - ZilinaMUN - www.zamun.sk (project YEL, HOPE) , International Mathematical Modeling Challenge - IMMC - https://immchallenge.org/ , The Duke of Edinburgh´s International Award - https://www.dofe.sk/en/ , Nurturing Leadership Programme with India Amity International School in New Delhi, ...)
- drama clubs in French, Spanish and Slovak language
- e-learning of a new subject integrated into the curriculum - financial literacy
- creative writing in Slovak, English, Spanish and French integrated into the lessons
- academic debate in Slovak, English
- new learning environment creation - painting the rooms, new equipment, school yard remake, corridors decoration, etc.
- excursions related to individual subjects or promoting interdisciplinary approach
- individual pupil's mobility programmes - spending 2-3 months in the partner school and reciprocally hosting pupils from abroad and so benefiting from multicultural environment

Some of our teachers have experienced mentoring/ coaching programme, which helps them to set the goals and design the lessons better. It is an 8-month programme aimed at professional and personal development with the help of a mentor.

- The school also offers teachers further professional development thanks to the Erasmus+ projects within KA1 - job-shadowings, language and methodology courses.

Other "innovations" in our school:

- As some students may have 6 to 7 different subjects in one day, this year our teachers of sciences and our deputy director tried to come up with a solution to prevent our students from becoming too overloaded. That is why this year the students have in certain days two classes of biology or chemistry in one day and so the number of subjects that students are having in one day is reduced.

Specification of French language teaching in the first year of their studies at Gymnazium bilingvalne, Zilina

- Number of classes: 20 classes of French a week
- Other subjects: Slovak language, biology, physics, mathematics, chemistry, physical education and religion/ethics are taught only on the basic level as a preparation for the second year of studies

System of teaching French language:

- There are 3 groups of students: the number of students is about 15 pupils per group
- Each group has 3 to 5 teachers of French language, among them is at least one (ideally two) teachers from a French speaking country
- Students use a text book (teachers also prepare extra worksheets as supplementary material for the classes). The text book is divided into units. Teachers divide each unit into topics and decide who is going to teach what. There is usually one „leading" teacher per each group of students (it is usually a teacher who teaches most classes in the group). This teacher usually says who will teach which part of the unit in the class. Teachers decide together the speed and number of classes for each topic within each unit. All the teachers who teach in each group meet regularly (at least twice a week) during which they inform one another about the flow of their classes. The leading teachers inform one another as well, so that all three groups continue in similar pace. If one of the teachers does not manage to teach his/her topic in given time, others may help him/her (under the condition they have gone through their part of the unit). Each teacher gives regular tests to check and evaluate the material they taught. There is a final „big" test at the end of each unit (one unit takes 1.5 week to finish) which contains the whole topic taught by all the teachers in each group. This test is given by one teacher (either the leading teacher prepares the test, or the teachers switch after each unit). Students also learn conversation topics during classes, which are not present in the text book. At the beginning of the school year teachers also decide who will teach each topic. Conversation topics are taught and revised during the whole school year.
- At the end of the first term (in January), students of the 1st year take a 3-hour test (it is an imitation of the final exam), during which they are tested in writing, grammar, listening comprehension and vocabulary
- At the end of each term the cooperating teachers need to decide about each student´s final mark from French language which will appear at the school report
- At the end of the school year (in June), students take the final exam and an oral examination from the topics they studied during the first year
- After successful passing of the exam, students continue to the second year during which they study physics, chemistry, biology and mathematics in French language
- Those students who do not pass the final exam have the possibility to repeat it or they can repeat the whole first year again

17. SPAIN – Instituto 'Miguel Catalan' Zaragoza

A bunch of them are shortly described below. We add a contact for everyone just in case more information is required.

1. MULTIDISCIPLINARY PROJECTS

- **"THE BEAUTIFUL AND THE SUBLIME: THE HUMAN BEING IN NATURE"**

This is an interdisciplinary project for 1st-year Baccalaureate students coordinated by the Philosophy department of the IES Miguel Catalán, in which the departments of Spanish language and literature, geography and history, technology, physical education, economics, and classical languages also participated. Its objective was to reflect on the relationships of the human being with nature from different theoretical and practical perspectives, being the central point of the project sport activities in the natural environment.

More information and contact: Marta Delgado Larrode mdelgado@ies-mcatalan.com

- **"SCOTTISH DANCE AND MUSIC WORKSHOP"**

This is an activity carried out by the Departments of Music and English, in which students learn aspects of Scottish culture and folklore using English, music and dance as communication vehicles.

More information and contact: departamento de inglés depingles@ies-mcatalan.com

2. LANGUAGES

- **"TELLING TALES IN GERMAN FOR PRIMARY SCHOOL STUDENTS"**

For one day, our 3º ESO advanced German students become storytellers with a very special audience: elementary students from Primary school.

To prepare the activity they will have to learn to work in groups distributing tasks and assuming responsibilities to achieve a common goal. They will, of course, put into practice the knowledge acquired from the language with good motivation. They will have to develop different skills, as for example creating all the necessary stages for their performance.

More information and contact: departamento de aleman depaleman@ies-mcatalan.com

- **"GYMKHANA IN GERMAN"**

This activity is designed by the bilingual section in German in collaboration with the Goethe Institut of Barcelona for students of 1st year of Bachillerato.

It consists of the realization of one of the different routes through the city with different questions in German that will be asked during the tour. All questions refer to the presence of German culture in Barcelona.

They will use an Android application that the Goethe Institut will put at their disposal.

The trip includes lunch at a German restaurant, where the students are given a free lunch as long as they speak German.

More information and contact: departamento de aleman depaleman@ies-mcatalan.com

- **"BERLIN EXPRESS"**

This activity is similar to the one described above, but in this case the gymkhana is located in Berlin

More information and contact: departamento de aleman depaleman@ies-mcatalan.com

3-LITERATURE AND READING (ACTIVITIES IN THE SCHOOL LIBRARY):

- **POETRY TO TAKE AWAY**

"Poetry to take away" is an activity to disseminate poetry in Secondary schools. The central idea of the activity has been the weekly delivery of a numbered poem, with a commentary, always with the same format and in DIN-A5 size, with the purpose of creating the habit of going to pick it up. The poems are collected from a special stall usually installed in the Library of the school. The collection is kept in an envelope or folder edited for this purpose.
Along with this collection, the "Poeta del mes" (poet of the month) has been published monthly, a booklet with a short anthology of a poet or poetress.
As a complement to this project, different activities have been designed for all the participating centers (as we share this activity with other schools): a poetry contest, celebration of the day of poetry, special monographic numbers of the weekly collectible, edition of a number of a poetry magazine with collaborations of teachers, students and families ... whose poems are published in the last issue of the weekly collectable ...
The work of selecting and editing the poems and preparing the activities is shared by the centers in turn, so that each week and each month one of them is responsible for sending their selection by email to the rest, which is published simultaneously in all of them. the institutes. For this, we have an email group as a means of communication
More information: https://bibliotecamiguelcatalan.wordpress.com/poesia-para-llevar/
http://poesiaparallevar-ljp.blogspot.com/
Contact: Carmen Andreu, biblioteca biblioteca@ies-mcatalan.com

- **READING CLUB: READING TOGETHER**

In the library of IES Miguel Catalán we have been organizing a reading Club. We invite all members of the center's educational community to participate. Currently the group consists mainly of mothers, parents and teachers, but we will be delighted to have students from the center. It should be noted, however, that this group, by the selection of readings that is made, is specially designed for students from upper Secondary Education.
More information and contact: biblioteca@ies-mcatalan.com

- **TRAVEL WITH US: A READING CHALLENGE**

From the library of IES Miguel Catalán we want to challenge students to travel with books. *"Wouldn't you like to travel to another country, to another continent, or even to another planet? How about a trip to the past or the future? Why not a trip inside ourselves? With the books you can do it.*
For eight months (October to May) the teacher in charge will publish a series of challenges in the IES library. Each challenge will consist of a selection of ten books of our funds that you have at your disposal. You can choose the one you like and take him home to read.
In addition in each book there will be a QR code to direct you to the website of the library where you'll find information on the reading and suggestions of films or music that are related to the trip you are going to undertake and that can accompany you in this adventure Literary.
In the library we will provide you with a passport to record all the trips you have made with our books and each one of the seals you succeed worth points that will bring you closer to other types of trips organized by the Institute: exchanges, study trips, etc.
We encourage you to travel with the books of our library and enjoy the beautiful stories that will tell you.
More information: https://bibliotecamiguelcatalan.wordpress.com/viaja-con-nosotros-reto-delectura/
Contact: Carmen Andreu Biblioteca del IES Miguel Catalán biblioteca

- **STORYTELLING ACROSS THE ATLANTIC**

Storytelling across the Atlantic was a project that connected the two Atlantic shores during the school year 2017/2018.

The name was inspired by the American poet Billy Collins' poem called Walking across the Atlantic, because it reflects very well the project's spirit: to create a communication path between the Cedar Middle School Spanish Dual Immersion students (USA) and the IES Miguel Catalán Spanish students (Zaragoza, Spain). As the poem tells, it is not the path end what matters, but the prints were left on our way, not only on our schools but also on our students.

I wait for the holiday crowd to clear the beach
before stepping onto the first wave.
Soon I am walking across the Atlantic
thinking about Spain,
checking for whales, waterspours.
I feel the water holding up my shifting weight.
Tonight I will sleep on its rocking surface.
But for now I try imagine what
this must look like to the fish below,
the bottoms of my feet appearing, disappearing
The apple that astonished Paris (1988)

The project involved the 6th grade Spanish Dual Immersion students and the 7th grade Spanish students and was developed in Language Arts. By participating in this project our students improved the four language skills in a communicative and motivating context: the communication with students of their age in a different cultural context. For that purpose, we exchanged presentations, videos and illustrated tales, that were sent by post to the corresponding American or Spanish partners. We worked out the other shore's productions and send feedback videos about every story to each student. It was a very enriching experience, which improved not only the student´s language skills, but also their self-esteem and motivation.

More information: https://bibliotecamiguelcatalan.wordpress.com/viaja-con-nosotros-reto-delectura/

Contact: Marta Delgado y Carmen Andreu Biblioteca del IES Miguel Catalán biblioteca

4.PHILOSOPHY

- **"PHILOSOPHICAL COFFEES"**

Students and teachers leave the classroom and meet in a very different environment. Conversation comes easyly and they deal with different contents in a much more relaxed atmosphere.

More information and contact: Marta Delgado Larrode mdelgado@ies-mcatalan.com

5. HISTORY

- **"WALKS WITH HISTORY"**

Every year, the Department of Geography and History organizes a series of walks that allow participants to know at the original place part of the history and art of our city. This actiivity is programmed for students although it al also opened to the whole educational community.

1- Visit the Roman Zaragoza (History of Art) / 2- Visit to the Zaragoza of the Sites (History of Spain).
3- Visit to the Torrero Cemetery (History of Spain). Historical memory.
4- Visit to the Zaragoza of the Sites and Museum of Goya (History)
5- Visit to the Renaissance Zaragoza.

More information and contact: departamento de Geografía e Historia
depgeohistoria@iesmcatalan.com

6. HEALTH

- **DIETETIC CABINET**

In the Dietetic cabinet the students of the second grade of Dietetics studies provide dietetic and nutritional advice to people from the educational community, relatives, friends, etc. who have an interest in the subject.
It is intended that students exercise the skills acquired in their studies of Dietetics as close as possible to the real conditions of the working world.
The contents of all the modules of the cycle are worked on: Diet Therapy, Balanced Feeding, Cabinet Management of Dietetics and computer tools.
Apart from that, students improve linguistic communication, the treatment of information and digital competence, the competence to learn to learn and autonomy and personal initiative.
More information and contact: Otila Hornero depsanidad@ies-mcatalan.com

- **HEALTHY BREAKFAST**

The objective of the program is to improve the students' breakfast routines in the 1st year of Secondary Education through three educational activities that take place throughout the year.
More information and contact: Roberto Herrero depsanidad@ies-mcatalan.com

7. COLLABORATIVE BLOGS:

- **HEALTH OBJECTIVE**

The project consists basically of the start-up and subsequent maintenance of a collaborative blog on health, considered from a holistic perspective.
The objective is to share content on health issues, especially those related to the habits of life that most influence the prevention of diseases. Always contrasted from the scientific point of view, fleeing myths, fashions, commercial interests and information without scientific basis.
We will incorporate information that facilitates decision making and promotes the dissemination of related scientific advances.
For this we will have the active participation of the students of the CGS of Dietetics, and of all those members of our educational community who wish to make their contributions.
It will integrate different sections such as the functioning of the human body, improvement of life habits, nutritional and physical activity recommendations, scientific advances, analysis of nutritional labels, culinary aspects, healthy recipes, relevant links, curiosities ...
We hope you find it interesting and motivating.
More information: https://objetivo-salud.blogspot.com.es/
Contact: Otila Hornero depsanidad@ies-mcatalan.com

- **WITH THE EYES OF CERVANTES**

At the IES Miguel Catalán, we decided to celebrate the IV Centennial by looking "with the eyes of Cervantes" and to know, through his look, different aspects of the life, the work and the epoch of the great writer.
For this we have created a collaborative blog entitled "With the eyes of Cervantes" in which we want to show the works, activities, suggestions, etc. of the IES Miguel Catalán to commemorate the IV Anniversary of the death of Miguel de Cervantes.
More information: https://bibliotecamiguelcatalan.wordpress.com/iv-centenario-de-miguel-decervantes-en-el-ies-miguel-catalan-participa-en-nuestro-blog/
Contact: Carmen Andreu Biblioteca del IES Miguel Catalán biblioteca

18. SWEDEN – Danderyds Gymnasium Danderyd