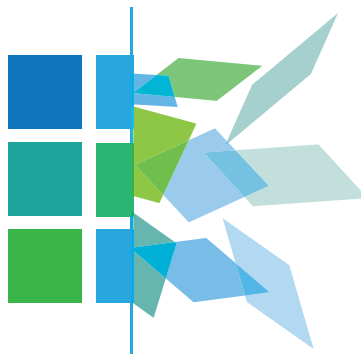


AVANGUARDIE EDUCATIVE



An innovation Movement open to all Italian schools which aims to create a network by identifying and supporting experiences that transcend limitations and inertia at educational, structural and organizational levels. Founded in November 2014 on the joint initiative of INDIRE and 22 founding schools which have tried out the so-called «Ideas», inspired by the Movement's Manifesto and its 7 «horizons».

FLIPPED CLASSROOM

This is one of the **Ideas** which, from year to year, enrich and expand the **Gallery of Ideas for Innovation**, a place that gathers experiences verified in the field by an ever-growing number of Italian schools.





FLIPPED CLASSROOM



The basic idea behind the «Flipped Classroom» is that the lesson becomes homework while the time in class is used for collaborative activities, experiences, debates, and workshops. In this scenario, the teacher does not play the role of a lead actor but becomes a kind of facilitator, the director of the educational activities. In the time at home, extensive use is made of video and other digital resources as contents to be studied, while in class students experiment, collaborate, and carry out workshop activities. To all intents and purposes, 'flipping' is an educational

methodology to be used in a fluid and flexible way, regardless of the subject or type of class. What is important is that the time 'gained' in class thanks to flipping is used in an optimal manner and that the resources used by the student in the time at home are of high quality, in addition to being gauged to the knowledge level reached up to that point by the young person. A library of contents supplemented by online videos selected on the basis of quality and accessibility are the best starting points to obtain a satisfactory end result.

The Flipped Classroom methodology is a response to the following objectives:

- development of skills in the fields of active citizenship and democracy through valorisation of intercultural and peace education, respect for differences and the promotion of dialogue between cultures, support in assuming responsibility, education in self-entrepreneurship;
- literacy in art, and the techniques and media for producing and disseminating images;
- development of students' digital competence;
- improving workshop methodologies and activities;
- prevention and countering of truancy/early school leaving, and of every form of discrimination;
- strengthening of scholastic inclusion and the right to study of pupils with special educational needs through individualized and personalized learning;
- valorisation of individualized educational pathways and involvement of the students.

The «horizons» of the Movement's Manifesto specifically refer to this Idea are nos. **2** and **4**, namely ***Taking advantage of the opportunities offered by ICT and digital languages to sustain new ways of teaching, learning, and assessment*** and ***Reorganizing teaching time***.



The theoretical benchmark framework

From a methodological point of view, the Flipped Classroom model refers on the one hand to the thinking of Dewey (1938), Montessori (1913) and Freinet (1978), while on the other, it echoes the *Peer-to-Peer Instruction* of Mazur (1997) and the *Inverted Classroom* of Lage, Platt and Treglia (2000).

Peer-to-Peer Instruction suggests shifting activities of a notional and routine type outside the classroom, in other words, the teacher provides students with material on a certain theme to be read before meeting in the class dedicated to that theme, while classroom time is used for the students to work actively on what they have read at home before the face-to-face meeting in the classroom.

The *Inverted Classroom* includes watching lessons at home, through the widespread use of technology, and the carrying out of tasks in the classroom, where possible in a group.





Why you should adopt the Idea

If in the traditional approach the class is focused around the teacher, in the Flipped Classroom approach it is the students who are at the centre of the class, and the classroom time is used to delve more deeply into topics and to work in ways that include the students' active participation. In the traditional approach, the teacher is the expert who transmits content to the students, normally via a lecture-based lesson. In this new approach, the class time, previously dedicated to traditional lecture-based lessons, is used to produce a series of active learning experiences.

In the classroom, the students, guided by the teacher, can carry out cooperative activities aimed at 'setting in motion' the knowledge they have acquired, working according to the method of cooperative problem-solving, carrying out activities of a workshop kind and 'educational experiments' to activate knowledge. The classroom turns into an area for work and discussion, a real community of learning and research in which students learn to use their knowledge by swapping notes with both their peers and the teacher. Thanks to this method, it is possible to exploit different modes of learning for the students, and it also becomes much easier to personalize the programming by planning, both within the virtual learning environment and in the classroom, specific educational pathways for individual pupils or groups of pupils with specific needs or requirements.





Example of an 'Implementation Guide' for the Idea

In a traditional educational pathway, work at home is thought of as something done later, after the teacher has 'given an explanation' to the class; thus, it serves as 'revision' to memorize and fix the concepts. Instead, in the Flipped Classroom, the time at home is used to study materials assigned by the teacher.

In reality, the Flipped Classroom is divided into the following steps:

1. Taking into consideration the context and the students' educational needs, the teacher can choose to use different types of digital resources, either self-produced, or found on the web or in online stores. What must be emphasized is that at this point the information has a function of anticipation and activation in the learning and should be challenging for the students or enable them to deal with something new and motivating, to raise questions that require further study and thereby foster development in the learning pathway.
2. The students will arrive at school with a wealth of information to be critically mobilized in a specific learning environment oriented to problem-solving and the promotion of skills. In fact, the time at school, no longer needed for lecture-based lessons, naturally encourages the group dimension or, what is even more desirable, a research community. Thus, in the classroom, the emphasis should be on variegated types of educational activity, such as

collaborative or experiential, including debates as well as workshops possibly devoted to producing an artefact, hence a product (a presentation, video, podcast, or eBook) all of which allows students to actualize the study process activated by the work at home in line with a 'learning-by-doing' approach. This product can be worked on and developed in a group but may also require individual reflection and input.

3. What is important is that the product created can be shared and presented in class and perhaps kept in a storeroom for subsequent consultation, or made available to the outside world via, for example, a class website or blog; this can elicit comments and observations and allows documentation of the learning process, also in view of a subsequent reflexive return on the work.
4. The moment when the teacher metacognitively supports students in explaining the learning path realized should not be underestimated nor when he or she returns to the concepts considered essential to highlight these and gives further guidance for investigation and study.

Let's do it!

Videopaper. The Flipped Classroom methodology in the teaching of Italian grammar in a lower secondary school (IC «Giannuario Solari» in Loreto, Ancona).

The video is taken from INDIRE's channel on YouTube™ «Rendere visibile l'Innovazione».

<https://bit.ly/2sQm3OW>





Actors/Roles

The Head Teacher. Motivates the staff and creates the necessary conditions to begin the activity. Encourages and facilitates experimentation. Encourages and supports the acquisition and/or production of educational content for the students' time at home.

The Teacher. Provides feedback on the homework and helps students reflect on the knowledge acquired in order to mobilize them in terms of problem-solving. Regularly observes the work done in the classroom, gives feedback, and assesses the students' work. Promotes educational activities oriented to learning-by-doing and metacognitive reflection on the pathway realized. Continually reflects on his or her educational practice and shares the pathways followed with his or her colleagues.

The Students. Study the lesson in the afternoon and apply the knowledge acquired at home in their time at school (through collaborative and experiential activities, debates and workshops). In the learning pathway which evolves from the study at home to the classwork, the students are invited to work with the support of the teacher and the collaboration of their classmates, with a view to problem-solving, learning-by-doing, and reflective learning.

The Family. The family is encouraged to share in the introduction of this methodological innovation and to support the new educational pathway and new learning processes also by reaching agreements with the school, which, in some cases, may include arrangements regarding the purchasing of devices or textbooks for the students. They are also encouraged to share in the activities carried out using this methodology, in order to give feedback on the students' attitude and way of working.

Others

Technical Staff. Deal with maintenance of hardware and software tools. Are ready to intervene in the event of any faults and are able to assist teachers and students in their use.

Actors outside the school. Local institutions and companies support the processes of educational innovation through sponsorship, which allows renovation and maintenance of the school's equipment and spaces.

Spaces/Resources/ Infrastructure (tips)

In the classroom or in other spaces of the school. It is necessary to equip the school with spaces which are more informal than the traditional classroom, and places suitable to house a rack to store the network apparatus. A router is also required to allow connection to the Internet and to run the school's LAN/W-LAN network using Ethernet technology, plus a Firewall to manage and filter traffic for the authorized Web services.

Technological and infrastructural resources. A broadband wireless connection, devices (smartphone, tablet, laptops), IWBs with related PC connected to the web to share work, dedicated external devices, unified cloud-based services, an eLearning platform that allows sharing of digital resources and documents the project realized.

Layout of the environments. To implement the Flipped Classroom it is necessary to supersede the fixed arrangement of the desks in traditional rows and to adopt a flexible 'atelier-style' layout, with the desks arranged in islands, more suitable for group work.





Bear in mind that...



A Flipped Classroom project realized in a learning environment oriented to problem-solving and the promotion of skills and in which ICT is a resource, certainly cannot be improvised but requires the involvement of teachers in an education scheme which does not lead to a purely instrumental use of technologies but includes ICT skills within a comprehensive interpretation of the many dimensions relating to the training of teachers: the use of technology in teaching practice, curricula and assessment, pedagogy, organization of the school, and development of the teachers' professionalism.



Frequently, the Flipped Classroom approach is accused of seeking to replace teachers with online resources. The fact is that to put this approach into practice, the teacher must be a professional expert in designing educational pathways; he or she must be able to take advantage of different educational models, encouraging both the development of a rich

learning environment and the formation of a community of learning and research among the students and teachers in order to promote quality organized knowledge. The teacher must therefore be both a professional of education and a social negotiator.

Why change?

- To allow improvement of educational interaction in the classroom, thereby optimizing the time at school; to develop and strengthen both independent and peer learning; to be able to devote more time to those young people who need more support.
- To put the student at the centre of the process, providing them with tools which allow them to investigate topics deeply, thereby generating a richer and more stimulating context. Students are not only
- actively involved in the pathway and aware of the objectives but are also involved in the assessment.
- To promote the development of students' digital skills, independence, and ability to work with others, thereby preparing them better for the world of work compared to traditional education.
- Because the young person is the protagonist of activities oriented to problem-solving and learning-by-doing and an interpreter as well as author of their own knowledge, thanks also to the ease with which ICT allows them to consume/produce contents.



To join **Avanguardie Educative** a school needs to be in agreement with the inspiring principles of the Movement's Manifesto and fill in the form available at **avanguardieeducative.indire.it**, entering the data of the institute and indicating one or more **Ideas** which it intends to adopt. The school can also propose an experience, an innovation experience that it has developed and consolidated; this will be analysed by INDIRE in collaboration with the 22 founding schools, to potentially transform it into an **Idea** or to add it to the **Gallery** as a deeper look at some **Ideas** already present in it.

Membership gives right of access to the assistance/coaching platform which, in addition to supporting the school in implementing organizational and teaching practices oriented towards innovation, allows the school to follow and participate

in webinars, workshops, talks, and face-to-face training activities. From the point of view of study and research, the objective which the **Avanguardie Educative** project has set is to support schools as they are changing in terms of education, structure and organization, while investigating possible propagation strategies and systematization of the innovation, with particular attention to enabling factors and any that hinder dissemination.

INDIRE's channel on YouTube™ «*Rendere visibile l'Innovazione*» gathers and documents the schemes in action of the **Ideas** of the **Avanguardie Educative** Movement.



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Avanguardie Educative is also on the social channels FaceBook™ and YouTube™.



Each Idea is a piece of a mosaic which aims to revolutionize the organization of teaching, and the time and space of 'teaching/learning'; each **Idea** is the product of concrete experiences verified 'in the field'. The **Ideas** present in the **Gallery** should not be regarded as 'independent units', but rather as the tesserae of a mosaic. A single **Idea** alone does not have the strength to 'unhinge' certain mechanisms that 'hamper' schools, which are often lost in red tape and disinclined to carry out experimentation and research; however, it can be a first step to break the inertia and a driver for change and 'contagion' between schools.

To learn more about this Idea, point the camera at the QR Code here at the side.



INDIRE is the Italian Ministry of Education's oldest research organization. Since its foundation in 1925, the Institute has worked closely with the Italian school system, investing in training and innovation while improvement processes in schools. INDIRE is the benchmark for educational research in Italy.

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