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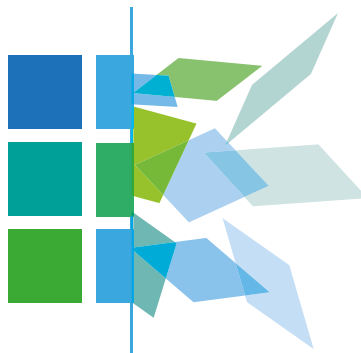PER LA SCUOLA – COMPETENZE E AMBIENTI PER L'APPRENDIMENTO (FSE)

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».

MLTV MAKING LEARNING AND THINKING VISIBLE

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.

MLTV - MAKING LEARNING AND THINKING VISIBLE

The MLTV project was conceived from a collaboration among INDIRE, *Project Zero* (research group of the Harvard Graduate School of Education in Boston) and 3 expert schools of the *Avanguardie Educative*.

MLTV is the acronym of *Making Learning and Thinking Visible*, naming that was used during the research and development phase in the school year 2017-2018. Later on, in order to ease the understanding of the Idea to Italian users, the naming was translated into Italian, and it became «MLTV - Rendere visibili pensiero e apprendimento», with the original acronym and the subtitle in Italian.

This Idea has three core constructs: first of all, *documentation*, which is defined as the «The practice of observing, recording, interpreting, and sharing through different media the processes and products of learning in order to deepen learning» (Krechevsky et al., 2013). Documentation is, in this perspective, the gateway to make learning visible to the student him/herself, to his/her classroom, and to his/her learning community. Documentation becomes an enabler of a new educational research process at school, since teachers, in group, discuss and share views on students' learning processes. The second core concept is *group learning*, defined as «A collection of persons who are emotionally, intellectually, and aesthetically engaged in solving problems, creating products, and making meaning in which each person learns autonomously and through the ways of learning of others» (PZ & Reggio Children, 2001). The third core construct in the MLTV Idea is represented by the system of all those indications (protocols, *Thinking Routines*, etc.) that make thinking visible and support the ability to think creatively, deeply and divergently. Thinking, indeed, is not only linked to the cognitive dimension but it is dispositional, distributed and can be made 'visible' through specific practices.

The «horizons» of the Movement's Manifesto specifically refer to this Idea are nos.: *1. Transforming the transmission school model*; *3. Creating new learning spaces*; *6. Investing in "human capital" by rethinking relationships (internal/external, face-to-face teaching/peer-learning, schools/companies, etc.)*; *7. Promoting innovation that is sustainable and transferable*.

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cod. 10.2.7.A1-FSEPON-INDIRE-2017-1

MLTV MAKING LEARNING AND THINKING VISIBLE

2

The theoretical framework

MLTV integrates two frameworks created by Project Zero, *Visible Thinking* and *Making Learning Visible*, and aims at their adaptation and localization to Italian secondary schools.

Visible Thinking uses specific cognitive routines, the *Thinking Routines*, a sort of organizational structures to guide students' mental processes and encourage active content processing. The aim is to make cognitive processes visible and to support a culture of exploration and the construction of critical thinking in school. Rather than simply listing facts, *Thinking Routines* encourage students to actively engage on a topic, to think with and beyond the facts they know, to connect new knowledge to previous one. *Thinking Routines* derive from the long research conducted at Harvard in the broader field of cognitive sciences, aimed at investigating the characteristics of higher level thinking skills and building the conditions for the realization of a 'Thinking class'. *Visible Thinking* has a twofold objective: on the one hand, to cultivate students' capacity for thought and disposition to think; on the other hand, to deepen the learning of disciplinary contents. By «disposition» we mean: curiosity; the search for truth and understanding; a creative mentality; the attitude of being not only skilled but also attentive to opportunities for thought and learning; willingness to catch those opportunities.

Making Learning Visible concerns the processes of individual and group learning and the role of *documentation* in supporting the development of meaningful learning in groups, in the classroom and at school. These two practices make learning visible. *Group learning* is promoted through five interconnected strategies: by increasing students' ability to learn together; by designing engaging tasks that benefit from a group perspective; by facilitating conversations that deepen learning (which include, for example, to exchange informative and constructive feedback); by intentionally forming groups; by designing an effective synergy between individual work, work in small group and the work with the whole class. *Documentation* is usually guided by a specific question and involves students and teachers in analyzing, interpreting and evaluating collectively individual and group learning; it is not only a beautiful final product and is not only a retrospective artifact, it also shapes the design of future learning contexts.

Why you should adopt the Idea

Adopting the MLTV Idea means acquiring the mindset of the 'reflective practitioner' who transforms his/her doubts and questions into research tools to fully understand in what conditions students learn better. The MLTV Idea provides a framework and tools to develop different kinds of thinking, which are essential to allow students to face complex situations, to solve problems, and to make decisions, connections, and inferences. It also means to take a different perspective in relation to students and colleagues, thus forming a new group of peers where students, teachers and the Head Teacher all work as partners in change.

The *Avanguardie Educative* school wishing to adopt this Idea must therefore be ready to rethink its learning and teaching practices. In order to do so, it is necessary that teachers work together to analyze documentation and are open and curious towards their students' learning processes and styles.

Within MLTV, the Head Teacher plays a major role in educational research activities, thus recovering his/her 'educational leadership'.

Thanks to precise indications and tailored tools provided by MLTV, teachers can easily work in multidisciplinary teams where subject skills and knowledge can be better interweaved and connected, as Morin indicates: «The problem of teaching starts from the fragmentation of subject knowledge and from the teachers' incapability to connect their subject contents to others', forgetting that the capacity of contextualizing and integrating (facts, contents, etc.) is a key feature in humans. School should nourish this natural mental attitude rather that demolishing it [...]. A reform of teaching should lead to a reform of Thinking and a reform of Thinking should lead to a reform of teaching».

Example of an 'Implementation Guide' for the Idea

The application of the MLTV Idea certainly requires a broad and complex process of rethinking the culture of thinking, teaching/learning strategies, the role of the student in the school community through appreciating the value of group learning.

The starting point is the teacher's analysis of the characteristics and needs of his/her learning group. The first step is therefore represented by the definition of the research question, which PZ calls the «global question» or «Overarching Question». Here are some examples: «How can I activate in the students those processes of deep understanding that represent the essential prerequisite for transforming inert knowledge into skills?», «How can I make thinking strategies visible and therefore transferable?», «How can I help my students to appreciate each other's point of view by getting out of their own individual sphere?». Within this framework, it is useful to go into greater depth regarding the tools and protocols of MLTV that can best perform these functions, specifically:

1. *Thinking Routines*;
2. discussion protocols;
3. tools to support group learning and documentation.

It is therefore useful to select *Thinking Routines* or protocols to experiment the MLTV Idea, bearing in mind the objectives set, both in relation to thinking skills and individual or group learning. The documentation can be introduced immediately, in parallel with the use of tools and protocols, or later on, when a certain familiarity with the Idea has been acquired. It is useful to involve a colleague or the students themselves in the documentation process, especially in group learning activities. In particular, analysing the tool «Starting with the Making Learning Visible framework», taken from the text *Visible Learners: Promoting Reggio-Inspired Approaches in All Schools*, is recommended as it provides a practical introduction to the fundamental principles of MLTV and describes five concrete and simple ways of using group learning practices and documentation with the aim of creating a strong class learning community from early school years. It is advisable to document not all the activities, but only what is necessary, considering the processes of sharing, discussion, reflection that will later be activated within the class group, or with the colleagues, in relation to what has been documented.

Actors/Roles

The Head Teacher. She/he is in charge of setting the right conditions for the group in order to allocate time for internal meetings, sharing workshops and, when possible, for co-teaching. She/he is an active player of the team and takes part to the discussion-guided protocols of the group.

The Teacher. She/he works in close collaboration with her/his colleagues and with the Head Teacher; sometimes the group discussion can be open to students, so that they play an active role in their learning process. She/he is the director of the process, she/he has a focus on documentation and supports students be autonomous.

Students. They are the main actors. They work under the supervision of their teachers but they are in charge of their own learning process.

The Family. Parents are informed during the process from the very first steps of the MLTV Idea implementation.

Spaces/Resources/Infrastructure
(tips)

In the classroom or in other spaces of the school. The class should have a flexible setting as most of MLTV activities will be run in pairs, sometimes in small groups or within the whole class arranged in semi-circle. Therefore, it is important to have an environment that is flexible according to the spatial needs of any *Thinking Routine*, protocol or other kind of activity. It is possible to use spaces outside the classroom – as long as they are equipped with comfortable furniture –, such as breakout spaces, informal areas or outdoor environments.

Technological and infrastructural resources. This Idea does not require any specific IT device. One may need to use ICT when online sharing is required or when, for example, someone wishes to comment on an image projected on a screen, or to record a discussion or to create a Padlet where students can store their works. For some kind of activities, teachers may need to have boards, markers, post-it™, scotch, etc. In fact, sometimes the groups' work is made visible on the class walks or in corridors.

Layout of the environments. A flexible setting is the best solution to meet a wider range of needs. Learning activities often demands for quick changes from peer work to small group to the whole class setting. It is therefore desirable to have a flexible learning environment.

Bear in mind that...

Thinking Routines **and protocols can be used** both alone and together with documentation. In any case, you do not need to try everything: it is enough to focus on those few tools that can help you promoting the culture of thinking and to use them as often as it is needed in order for them to become part of the teaching and learning 'routines'.
This is a slow process, it requires a long time before one can appreciate the first results, therefore it is important not to give up.

The «MLTV - Rendere visibili pensiero e apprendimento» Community will provide suggestions and hints for reflection together with some practical (subject-based) ideas already tested by other Italian teachers. Every school involved will have to look for its own path to personalize the Idea according to the context.

Why to change?

Teachers:
- to increase the 'reflect-on-action' attitude in the daily activity.
- to build a genuine collaboration among colleagues based on a regular sharing activity.
- to build a community of teachers oriented to improvement.

Students:
- to develop critical and creative thinking.
- to learn how to be active in their process of knowledge building.

- to learn how to argument and support their opinions with evidence.
- to promote deep learning and a better retention of knowledge.
- to encourage a democratic, respectful attitude in class where students are able to listen to each other.
- to learn how to learn, both individually and in group.
- to develop awareness about their own thinking, cognitive processes and study method.
- to learn how to nourish the social dimension and how to manage and cope with problematic situations.
- to develop citizenship and teamwork attitudes that are crucial for employment.

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™, YouTube™ and Flickr™.

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.

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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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[EN/AE-MLT-12-2018]

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