"Avanguardie Educative":
A Cultural Movement for the Educational and Organizational Transformation of the Italian School

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Abstract

This paper describes "Avanguardie educative" (http://avanguardieeducative.indire.it), a Movement of innovative schools being researched by INDIRE with the aim of studying how teaching and organizational changes may be implemented within a school and mainstreamed to other schools.

The main ideas of the Movement are described in its "Manifesto" written by INDIRE with the contribution of the 22 school head teachers who are the co-promoters of the Movement.

The Manifesto is built around seven pillars that, together, provide the vision for a new school model that is more aligned with the challenges of an ever-changing and -demanding knowledge society: transforming the lecture-based model of schooling (where the teacher speaks and students listen); exploiting ICT's potential to promote new ways of teaching, learning and assessment; rethinking the learning environment; rearranging the school time; aligning the school culture to the challenges of the knowledge society; investing in networking and fostering relationships (i.e. school-community and school-work relationships); making innovation transferable and sustainable.

Based on this vision, the Manifesto showcases some innovative practices that challenge traditional views of learning space and time, and teaching and learning processes themselves. Among these practices some trends can be discerned. The traditional lesson scheme was abandoned and students became protagonists of their own learning, fostering their creativity and critical thinking. Furthermore, these practices engendered a rethink of the learning environment, together with its furniture and internal learning layout, since more flexible and interactive activities occur. Another trend observed was a change of the schedule of the lesson, together with the need for closer collaboration with the school itself and with the socio-cultural context.

At present, the Avanguardie educative Movement involves 22 advanced schools and 127 practitioners, and it is open to more schools that want both to test/adapt one or more innovation practices and to propose new ones. The common objective is to transform the current model of schooling that is no longer adequate for a new generation of students and for our knowledge society.

Schools that choose to test one or more innovative practices will be involved in a blended learning course, using online platforms and face-to-face meetings, and will be provided with coaching assistance by the 22 existing advanced schools and INDIRE.

1. Introduction and background (by Silvia Panzavolta)

INDIRE (National Institute for Documentation, Innovation and Educational Research) is the oldest institution for educational research in Italy. From the outset its mission has always been to foster innovation in school at various levels (organizational, didactic, educational, etc.) Since the early 2000s with the beginning of the e-learning era, INDIRE has been designing and managing a series of online and blended training courses designed for teachers and school staff to develop skills, and to innovate not only in learning and teaching but also in the management of the school. The training model is inspired by social constructivism, in which collaborative production of educational resources, discussion of case studies and sharing educational experiences are considered a central part of the learning activities. It builds on "action-research" methodology with the aim of encouraging trainees to test activities and co-design their learning process [1], in line with adult learning patterns. However, the approach is top-down, e-tutors training the teachers and the headmasters.

This top-down training model has some limitations. The first is that it does not have a systemic impact on the whole school; the trainee is often the only one benefiting from the training and may use it in a marginal way without being able to spread it within their own school. Other limits concern time, money and the evaluation of the effectiveness and efficiency of the training.

Since 2009 in Italy there has been a great effort to digitize the school. It is a broader process that is part of a strategy for general renewal of public services, in line with European recommendations and national and international policies [2][3][4][5]. The Ministry of Education has put in place a series of

actions (The IWB Plan, with the distribution of over 50,000 interactive whiteboards, the project Classes 2.0, with the training of over 4,600 teachers and the involvement of more than 8,600 students from primary to upper secondary, the project School 2.0, and so on [6]), but always top-down. Since 2012 INDIRE has been carrying out a research project called Avanguardie educative, which, as suggested by the OECD, focuses on some highly innovative – even disruptive – practices that can act as inspiration for others. The OECD, in fact, suggested to move from a top-down national to a bottom-up model ("*Enrich the current nation-wide model focused-, on- the-job, school-wide training initiatives where INDIRE could be used as a counselor than a provider of training*") [7] using a connectivist framework [8] where it is essential to support the creation of school networks.

The coaching designed by INDIRE therefore follows the same vision. During the first phase of the research, INDIRE observed that the educational practices identified as being the most innovative and disruptive operate on three main levels: time, space and teaching/learning processes. It is argued that, if the model of schooling has to be changed from a lecture-based one to an active and participatory model, those three levels are crucial, as observed in the schools studied.

2. The Avanguardie Educative Project (by Lorenza Orlandini)

The research project Avanguardie is a Movement of innovative schools being researched by INDIRE with the aim of studying how teaching and organizational changes may be implemented within a school and mainstreamed to other schools. The vision and mission of the project are detailed in its Manifesto written jointly by INDIRE and the 22 advanced schools and signed up to by new schools joining the network.

The Manifesto considers there are seven pillars that inspire activities and practices, and these underpin the "gallery of 12 innovative practices". In these practices, selected by the INDIRE researchers, students are active protagonists of their learning process, developing critical, reflective, and creative thinking.

This profound change in the role of students can be observed, for example, in the "Debate" practice, a discussion where two groups of students are positioned for and against a particular stance, or in the production of "digital educational content" [9] in which students and teachers collaborate to create digital resources. A similar approach can be observed in the "ICT Lab" practice which involves making both digital and physical artifacts [10],coding and physical computing.

As well as changing pedagogical practice, the practices advocated by the Movement call for a change in school management and school architecture [11]. For example, the practices "Subject-related classroom lab" and "Flexible spaces" promote the customization of classroom layouts according to subjects, and the use of modular learning settings.

At organizational level, the practice "Block scheduling" implies the rearrangement of the school year so that all the hours planned in certain subject are concentrated in only one term, in a single block. This different management of time allows teachers to move from a lecture-based lesson model towards collaborative activities and workshops that usually require longer time. The "Flipped classroom" is another example where class time is redesigned: students develop critical and reflective thinking in class based on what they learned at home.

The Movement is open to all Italian schools who wish to join, by completing the form "Test a practice" or proposing their own. This will nourish a community of innovative teaching practitioners with a common vision: to change the industrial model of schooling [12].

3. The Coaching model (by Chiara Laici)

As highlighted at European level [13], transforming the school system implies the shift from a top-down to a more contextualized approach, based on the analysis of schools' innovative experiences. This approach is participatory and collaborative, where all the actors have an opportunity to contribute to change and innovation, and by activating networks of schools.

This strategy is consistent through all the stages of the project: in the innovative practices selection phase, in the design of the support to newcomers and in the coaching model itself.

The coaching model was the result of co-designing between INDIRE and the advanced schools in order to have the adopters co-construct meaning in a community of practice and be supported during the piloting of innovative practices [14][15]. It is also designed to support and build connections, relationships and networks among the schools of the Movement [16] so as to mainstream innovation.

Researchers and teachers have been working with a twofold logic of theory and practice, trying to implement a blended coaching process [17] encompassing experience, reflective observation, theory and experimentation [18]. This is to avoid the misunderstanding according to which "*first* you know and *then* you act", highlighting the cognitive value of the action [19].

During the design of the coaching model, INDIRE and the advanced schools worked face-to-face and online using a dedicated platform that hosted asynchronous (forums) and synchronous interactions (video conferencing) and document sharing. An important part of the work was the construction of the "Guidelines for the implementation of practice."

By using a common schema for describing the practice, and by administering questionnaires and interviews, a document was developed and written jointly by researchers and teachers/headmasters.

In the guidelines school stories are presented, bibliography and links to online resources are given and a section is dedicated to the conditions for the effective implementation of the practice.

The coaching model will involve the existing advanced schools supporting the newcomers; INDIRE will coordinate all the actions and maintain relations with all the different stakeholders.

In the first phase of coaching (March-June 2015) the following activities are planned:

- A webinar introducing each practice and the subsequent signing off of the "School Commitment to the Movement";
- Face-to-face meetings to present the practices and to give guidelines on how to implement them, also by using an "adoption plan";
- Three thematic webinars for teachers;
- One webinar specifically addressed to the headmasters of the new schools.

4. Research perspectives (by Elena Mosa)

Avanguardie educative aims, over three years, to implement and test some aspects of research and development. First, as the Movement's network grows, from September 2015 coaching will take the form of a Community of Practice [20][21] of teachers and headmasters who share interests and experiences of innovation. In this area, practitioners can access self-regulated study material or get support through school leaders and teachers and share their work with colleagues from different areas and interact both in structured courses and in less formalized ways (formal vs. informal). From the observation of interactions within the community and through observation visits to Movement schools, as well as questionnaires, interviews and focus groups, INDIRE researchers will develop three research strands. The first is aimed at deepening the implementation of the practices with particular attention to the many facets that these inevitably assume in different contexts of the piloting (eg. the practice of "Debate" in some cases is adopted as a teaching method, in others as a subject with a separate assessment). The second and third level will investigate the meaning of "up-scaling" and "mainstreaming" innovation at school level by identifying possible trajectories of clustering of innovative practices in order to fulfill the general objectives of the Manifesto, that is, the implementation of a radical reappraisal of concepts of time, space and teaching/learning processes in the Italian school system.

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