

## La didattica laboratoriale

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The article is about active learning, usually referred to as “in-laboratory learning”, a learning situation where knowledge and skills, cognitive, social and emotional aspects, plans and execution of projects integrate together effectively: it is the favourite “place” to develop individualised educational paths.

Active learning is not a new methodology, it has its theoretical roots in educational activism and constructivism: Dewey, Freinet and all those authors who have reflected on the role of “doing” and the importance of personal discovery to produce knowledge.

Nonetheless the methodology has often been considered as a separate technique, different from the everyday, traditional school practices. It has been used for subjects that were considered to be less important or which were felt to provide enjoyable moment in the daily routine.

In vocational schools the laboratory had the task of putting theoretical concepts into practice, offering a training experience.

Active learning is an opportunity for a real innovation in organisation and methodology as it redefines teaching spaces and times and promotes learning based on research and practice, not on simply listening to a teacher’s lecture. It goes beyond the model of school based on formal learning to learning through the realisation of projects, which makes the student the central character in a real, meaningful, cooperative dimension. The logic of the reproduction of knowledge is abandoned to make room for the re-construction, and re-invention of knowledge.

The “laboratory” can be used as a metaphor for all learning: a “space” to share experiences, to learn how to use procedures, materials and methods which enhance effective processes and which help build up knowledge. It allows to create learning situations which

- use building up knowledge instead of simply reproducing knowledge
- undertake real tasks
- allow multiple representations of reality
- encourage reflection and reasoning
- promote the cooperative construction of knowledge

The term “laboratory” is connected with work (latin laborare), “laboratorium” was the place where handicraft activities were developed. The “laboratory” encourages and supports practical, in situation learning: theoretical knowledge and doing are not separate activities. The activities in “laboratory” lead to cognitive processes as well as to manual ones, a complex process which integrates mind and hand. Awareness of this kind of integration allows the student to avoid the risk of aiming at “achieving” as an end in itself and of considering the final outcome as more important than the work undertaken to achieve the outcome.

The “laboratory” allows the student to reflect on what is being done, to experiment and try different solutions, without the pressure of a schedule to be respected at all costs, to do and to experience the pleasure of doing.

In a “laboratory” the teacher is the person who creates and promotes planned activities to learn. He/she encourages students to express themselves, mediates problems and supports students in the required processes.

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