



Cap sur l'école inclusive
en Europe



Resource sheet

Metacognition and teaching / learning

Section D/Training module

1/ Report:

Importance of a metacognitive teaching approach; reflection on the learning and teaching styles.

2/ Approach - demonstration:

The "fiche" is inspired by the reflection on the importance of a metacognitive teaching approach. Since this approach cannot be estranged from the reflection of cognitive styles, afterwards we analyze the influences of the above mentioned styles on the teaching / learning processes. We finally propose a simplification and a reduction of the polarities of the learning styles (and of teaching) to two fundamental reference fields: a systematic analogical and a digital-holistic one. Simplification aims to manage with stronger effectiveness the different individual situations and to promote and encourage in the students a greater strategic flexibility.

The concept of metacognition was included as part of the cognitive psychology in the late '70s. The word literally expresses the idea of "thinking about thinking"; a metacognitive attitude indicates both the awareness of the person to his own cognitive processes (metacognitive knowledge), and the transactions with which the person coordinates, monitors and controls his cognitive abilities to evaluate them and draw conclusions (metacognitive process of control) (1).

A metacognitive teaching approach is therefore profitable towards the most part of the pupils, and not only in respect of those students who show learning difficulties.

The development of metacognitive skills can improve learning? Certainly, there is an important relationship between skills and metacognition, and research shows that an activity aimed to promote knowledge and metacognitive control not only improves performance, but also produces a stronger motivation and a more positive attitude toward the task (2).

A metacognitive teaching approach is therefore profitable towards the pupils' general, and not only in respect of those students who show learning difficulties.

This kind of approach requires a teaching organization whose objective is to create in the learner a real method of approach to the study.

The strategic and methodological choices carried out by the teacher have to be clear and consistent with his teaching styles compared to the learning styles of the students: in the last decades, in fact, in Italy and abroad, the need for an individualized learning whose aim is to promote knowledge, skills and masteries in all subjects, regardless of the degree of knowledge and basic skills, has released.

Thanks to the reflection on the cognitive styles and on the learning styles, in the center of the teaching-educational process the pupil has been placed, while stimulating, in the same time, a suggestion on the most appropriate teaching methods and approach to the different disciplines (3).

Regardless of the historical evolution of the concept of the cognitive style, that is very wide and it appears as "approach" to the world in different areas of behavior, in the teaching area it is more profitable to refer to

the learning style, i.e. to the method to process the information. And there is no doubt that the learning style of a teacher, on which his thoughts and his beliefs has been built up over time, influences his teaching style. The difficulties of the impact between the student and the teacher's strategies, are also added up to the individual variability, ie to the extent in which the strategies are implemented and used by individuals and the variability of the tasks, ie to the extent in which strategies can be useful depending on the task to be done (4).

The reference to the general context and to the influence of the environment need therefore a flexible style that can be suitable both for the specific request and for the person to whom the request is made.

If it is a good practice in teaching the style of an individual, and for this reason making him aware of his own individuality, it is also necessary to urge the use of his own strategies that he normally does not use. Therefore, how is it possible for a teacher to respond to the individual needs, to the information processing styles of all his students and at the same time not to modify his methods of teaching / learning that interact with those of the students?

Cesare Cornoldi, Rossana De Beni and MT Group of the University of Padova have identified five major polarity pairs related to cognitive styles (5)

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- 1) Systematic - intuitive;
 - 2) Global - analytical;
 - 3) Fitful - reflexive;
 - 4) Verbal - visual;
 - 5) Individual / creative - dependent on the field.

Apart the last pair, referring to convergent and divergent thinking, which recovers the distinction of Witkin (1962) between a style that is not influenced by the context and a style "dependent on the field", I believe that the other four polarity couples lend themselves to some common considerations.

Since it is not possible that at school a teacher fit all the activities proposed to the peculiarities of each student, it is essential to find a non-exhaustive solution, but flexible enough to correspond to some basic general characteristics.

The teacher must know how to read the needs of all pupils; he must be able to interpret them and to know how to cope with: he represents, in fact, the first facilitator, the first "compensatory" tool, the learning catalyst (6).

My teaching experience leads me to perform a simplification that however allows a variety of situations-stimulus and that better adapts itself, probably, to manage the different individual situations: that is, to consider two basic approaches, one more analogical (systematic, analytical, verbal ...) and the other one more holistic (intuitive, global, visual ...).

The analogical approach provides a conceptual plan generally supported by sequential and systematic procedures; on the contrary, the holistic approach prefers the consideration of the whole, the immediate formulation of hypotheses, visualization and imagination.

The recognition of the style and strategies features used by the students will be the starting point to promote in pupils the awareness of their own reference style, but also the need to increase and adapt the methods of approach to the request in order to use strategies that aren't usually employed.

The teacher able to alternate and combine in the class proposals and methodologies related sketchily to a different style (holistic or analogical) can reply in a better way to the individual features, enhance them, and tickle in the students a strategic flexibility essential not only in school, but in life.

Bibliography

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