

Mauro's Project

Gabriele Fulgoni, *A proposito di mappe concettuali in "Progettiamo"*, Tramontana & Markes, febbraio 1996

Summary of the article *Mauro's Life Project - Concerning Concept Maps*.

If we consider the amazing complexity of man's chain of knowledge, he must divide up his enormous cultural baggage to put order into it.

There are many possible criteria. A schematic way of doing so, opportune and yet arbitrary, is through disciplines, better known in school as subjects.

Understanding these complexities and, when possible, analysing these chains, is an important cultural process necessary to appreciate the scenario, the context in which every individual, every student, must orient himself, and with which he must interact in order to make a place for himself in society. Let's use as an example the lack of success of the student Mauro, who has low self esteem because education has tried to put order in his head by using the theoretical disciplinary method.

Mauro has interiorised, often in a confused manner, a chaotic world, overabundant and repetitive, and has created his very own Personal Encyclopaedia, which shows traces of all the uncertainty that has progressively been making it up.

Let's try to represent the mind of Mauro, the adolescent, by using a metaphor: a room full of toys and presents, without a shelf, without a wardrobe, without any order whatsoever, where everything is heaped on the floor in one big, dusty pile.

It is obvious what role education could (should) play in Mauro's case: It should put order in this array of cultural baggage, so that, should he need it, Mauro can easily access and use it.

Among the many possible organisational methods, education has chosen disciplines-subjects. Knowledge has been broken down and reorganised into categories, thus defining a coherent theoretical scheme for each discipline. The relationship between the discipline and reality is, therefore, very strong.

In the world of information we can observe an extremely strong bond between reality and its theoretical representation. Unfortunately, Mauro, unlike many of his school mates, has met with a school system which, trapped in a primarily theoretical disciplinary vision, hasn't helped him relate with the facts.

It is a school system that rewards the memorisation of notions and the puzzling use of theoretical exercises.

And yet Mauro had a rich personal interpretation of reality, which, if reorganised would very well have also given him a sense of the indispensable theoretical-disciplinary study.

Educational assessment can help us get Mauro's self-esteem back and avoid other students from losing it.

A noteworthy assessment grid gives a qualitative facet to the assessment; it should familiarise the student with his difficulties and suggest what actions he should keep under control, to perfect his performance (pragmatic planning method).

The planning method is self-motivating because it bears the strength of objects and facts, and of solidity, while being integrated and completed by a disciplinary method that allows it to widen the linguistic goal and cognitive goal level.

We have two ways of achieving knowledge: A disciplinary theoretical method, organised by the criteria of cause and effect and of the gradualness of the disciplines-subjects, and the pragmatic-planning method, based on the project, which draws merely the knowledge that is strictly necessary for its realisation from the economical resources of the various disciplines. The planning method bears the strength of objects and facts, and of solidity and is, therefore, self motivating.

The planning method however does not give an overall view of knowledge and does not allow the student to acquire the relative linguistic-sectorial systems completely. To obtain this the disciplinary method is essential, because it allows the student to widen the goal level, linguistic goal and cognitive goal, and allows him to use that knowledge in any other similar situation.

The two views on achieving knowledge have historically been set one against the other in schools, but are really not irreconcilable. The continuous feedback from these two methods helps us to strongly motivate the student in theoretical-disciplinary studies, with the definite understanding of its ability to be spent, and to acquire active skills, which theoretical studies alone cannot guarantee.

The project must be designed and disassembled in all its parts and undergo numerous adjustments before it can be employed. The contents that make it up must derive from the disciplinary areas involved. It would be helpful to be able to acquire them and then to move within the discipline, which has its own epistemic apparatus backed by a corresponding linguistic-sectorial system. These cognitive operations must be set in motion in the student and it is of no use if the teacher is doing it for him. He must learn to choose from a confused mass of facts, in other words to be able to carry out a selection from a context of coherent facts and place them in a container, in a segment of his project.