Psychopedagogy for Engineers

Since 1994 we have been written papers about learning process to congresses of engineering teaching. Our first papers had been written in a more traditional style. Later, due our approaching with the psychopedagogy and psychoanalysis, we have adopted little by little a freer style. And, the latest papers, following this idea of freer writing, explain the learning process through these subjects: dreams, jokes, parapraxis, mistakes stories and histories of learnings of the daily life.

Through them, we try to show our point of view about: a) the viability and the value of psychoanalytical method in the production of new knowledge; b) how psychopedagogy, through the articulation of genetic epistemology and psychoanalysis, can help us understand and solve the problems of learning in engineering colleges; c) how a transdisciplinary work can guide the efforts of researchers to improve the quality of the engineering learning.

According to Freud, the unconscious processes determine our thoughts and actions. Based on this principle, psychopedagogy can show us that the majority of the learning problems occur due to disarticulation between know how and knowledge. It means that such disarticulation occurs when a man does not get, from his unconscious, know how to seize up to his knowledge.

To the reader not familiar to psychoanalysis, we invite to approach with the method of research invented by its founder, reading something from one of his texts. In it a little of Freud's spirit is transparent and shows why he dedicated great part of his life writing about unconscious processes of the human mind: “In dreams, the connections are partially absurd, partially imbeciles, or even though meaningless or strangely insane. This last feature can be explained by the fact of in dreams, the compulsion to associate predominates and there are no doubts it dominates the psychic life in general. It seems that two coexistent cathexis need to set themselves in mutual connection”.

Transposing it to the learning situations, we can say that in the knowledge construction, besides cognitives processes, there are also unconscious processes of free association of ideas.