THE SECRET OF THE LEARNING STUDY

Learning is always the learning of *something*. This something is simply what the learners are supposed to learn: adding fractions, distinguishing between different genres, writing a job application, understanding why higher speed might cause more pollution, etc, etc. We call it the object of learning. Whatever the learners are supposed to learn, there are always some necessary conditions for this to happen. You can not possibly learn to add fractions without having encountered the whole-part structure of fractions, without having an encountered sufficient variation in fractions to be able to distinguish between nominator and denominator. You can not possibly grasp the concept of "genre" without having encountered examples of similar contents being dealt with according to the conventions of different genres, and so forth.

Differences in learning are functions of the presence or absence of necessary conditions for learning. The presence or absence of the necessary conditions for learning are themselves functions of various conditions, such as, for instance:

- 1) The teachers' understanding of what conditions are necessary for a specific case of learning,
- 2) The learners' willingness to learn (it is the learners who must encounter, i e *experience*, that which has to be encountered),
- 3) The way in which learning is organized: whole class teaching, individualized instructions, work in groups, project based learning etc
- 4) What resources available: computers, software, excursions and other out of school activities...etc,etc

If you discuss learning in general-as is mostly the case with discussions about learning- you discuss things which are general for learning, such as those mentioned under points 2-4 and you make statements about what resources should be available and should be used, how learning should be organized and how the students should be motivated. You expect your conclusions be true in general for learning and you expect the teachers to address the specific things they have to teach in accordance with those general conclusion. So when the teacher gets to what is most important for learning, namely the creation of the necessary conditions for the specific object of learning, most of the parameters are already fixed: e. g. you should use everyday content in order to motivate the students, they should work in groups, they should use IT.

When you talk about the learning of *something*, as you do in lesson studies, teaching studies, learning studies etc, you start with what is most important, namely how the

specific object of learning can be best taught, how the necessary conditions for learning that specific object of learning can be brought about. And then you decide about the other points in relation to what you find best in that specific case. This is the secret of the learning study, I believe.