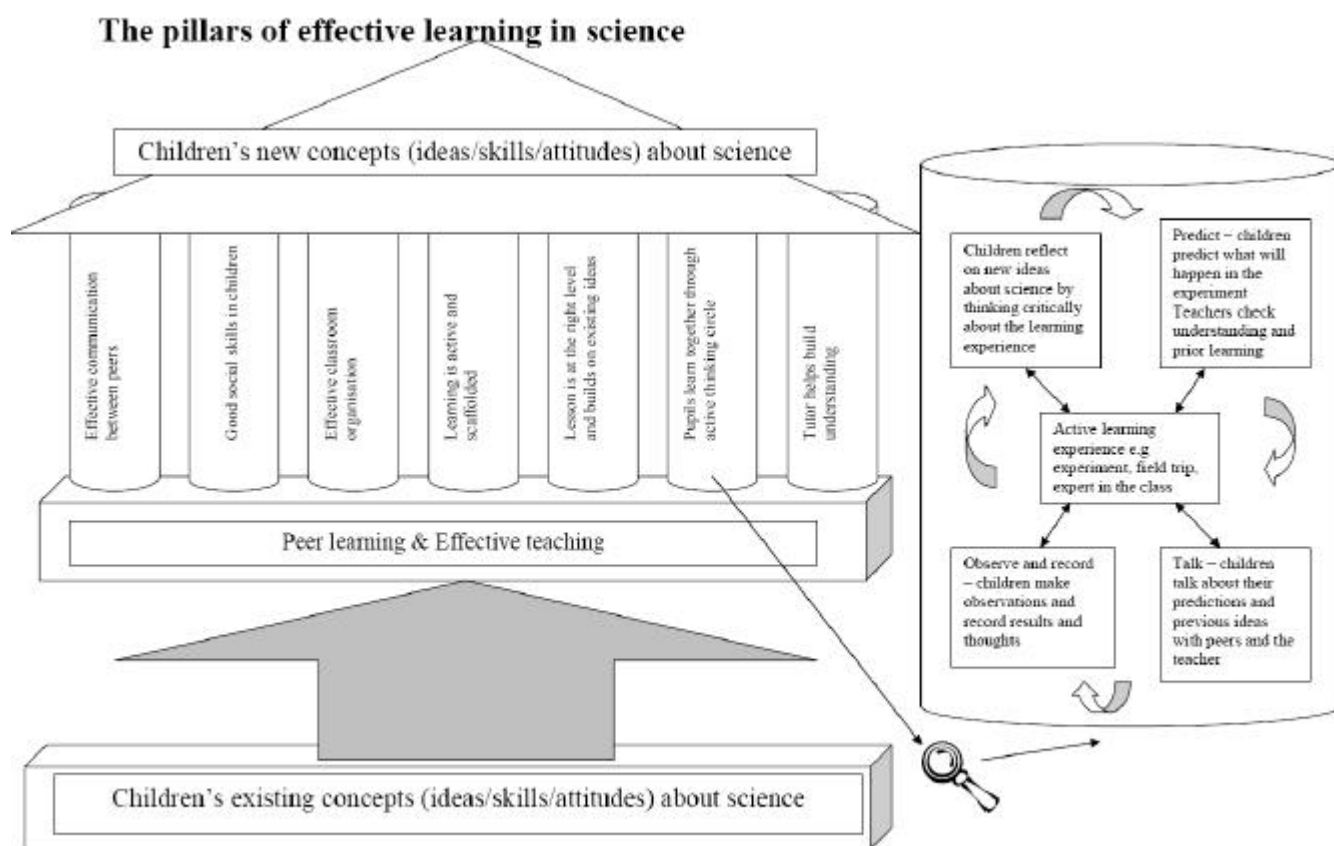


The didactical STIPPS model: justification and how it is worked out during the STIPPS project

Based upon the theoretical vision and the global STIPPS model was created during the first stage of the STIPPS project.



The different aspects of the model (the pillars) are worked out by the partners during the project.

The model is metaphorically represented as a temple with a child's initial situation as basis. This initial situation comprises children's ideas concerning scientific phenomena or problems. It contains domain specific knowledge and refers to phenomena, concepts, laws, etc. It is important to realise that not every child possesses the same domain specific knowledge. This fact has to be taken into account during the process of assisting.

The roof is the ultimate goal to be reached with the model, which is offering the child a toolbox full of thinking and problem solving skills. These skills contain the prerequisites of thinking and problem solving, which allow a human being to understand the world's complexity and to think of adequate solutions to certain problems. A learning line was made for these thinking and problem solving skills on the basis of a study of the attainment targets for (pre)primary education.

Within the didactic model, we depart from the point of view that education may never concentrate upon the sole acquisition of specific knowledge and skills inherent to a specific field. Education must aim for the general goals concerning the cognitive, metacognitive and

affective components of competent behaviour. Therefore, we take into account the accents constructivism places upon learning: learning is a cumulative, constructive and active process. It is context-dependent, meaningful and especially a social activity.

Peer learning is part of the temple's foundation as it is a precious way of working that links to all the pillars of the model because:

- It makes pupils learn from each other. Children learn more easily and efficiently in an adapted social context.
- It spurs on pupils and challenges them to learn actively and constructively (learning is active, challenging and explorative)
- It stimulates interaction between pupils (cooperating skills)
- It makes use of difference between pupils, turning those into opportunities to learn (from) each other and the assistant (effective communication among pupils and between them and the teacher)
- It contributes to realising a good pedagogical climate (rich class environment)

One can find theoretical perspectives on Peer learning in primary school science and implications for classroom practice in a former STIPPS article (Thurston, 2007):

The model will be worked out in different layers for each pillar so that it can be used as a work package for teachers.

Layer 1: The global model with all his aspects proposed as a scheme

Layer 2: a scheme for each pillar

Layer 3: a full text version which explains the pillar

Layer 4: a learning line for each pillar

Layer 5: video clips, lesson plans, activities, examples of good practise that focus on each pillar within the model