natural authority of teachers and attention paid to the application of knowledge to real life situations and divergent thinking. It was also possible to observe, less frequently though, that pupils were led to search for and critically evaluate the relations between different phenomena. However, they had only limited space for independent formulations of the core of problems or of drawing conclusions. Support for pupils in making independent suggestions about gradual steps in how to solve a problem or support for pupils' judgements and the use of their experience for formulating hypotheses ranked among the weaknesses. Practical experience (work in school labs, pupils' experiments) was included in lessons with several exceptions only. 80 % of classes were taught in rooms designed for such activities (laboratories, outside space, greenhouses and so forth).

Positive Findings

- a definition of cross-subject relations; emphasis put on links between topics taught and life situations;
- active use of different sources to enrich lessons, involvement in projects, use of different forms of partnership;
- moderate development of work on quality management systems and on systems aimed at education achievement in schools (participation in external testing, slight development of work carried out by methodological bodies in schools);
- use of professional terminology and symbols, the logical structure and intelligibility of lessons; emphasis put on repetition and the strengthening of topics taught, good time arrangement of lessons (natural science terms were used according to the definitions of OECD/PISA);
- incorporation of practical activities in the instruction of the relevant subjects.

Risks

- partial gaps in incorporating obligatory outcomes of FEP in SEPs of schools (approximately one fifth of schools);
- not very extensive provision of optional and non-compulsory subjects, mainly in small basic schools; limited provision of opportunities for further development of talented pupils (besides participation in subject competitions);
- roughly one fifth of lessons are taught by unqualified teachers;
- in a number of schools there are no comprehensive systems of how to verify and ensure the quality of teaching and results of education in natural sciences; absence of methodological bodies in some schools;
- a low rate of leading pupils to independence when proposing sequential steps to problem solving or the use of pupils' judgements and experience for formulating hypotheses (this area overlaps with natural science procedures according to the definition of OECD/PISA – problem solving competences).