



## Development of Natural Science Literacy

In the framework of the inspection cycle and in accordance with the “Plan of Principal Assignments of the CSI” evaluated the development of pupils with regard to natural science literacy. At the elementary level the CSI monitored the “Humans and Their World” educational area of FEP whilst at the second level of BSs inspectors concentrated on the “Humans and Nature” educational area (physics, chemistry, biology and geography). The development of new tools and procedures which would allow for the evaluation of the effectiveness of support for natural science literacy in education was launched in cooperation with the Faculty of Natural Sciences of Palacky University in Olomouc. The Annual Report encompasses only the main conclusions arising from the findings provided while in-depth research will also continue in this school year. The CSI will publish its results in a separate thematic report which will be published in the first half of 2012.

At the level of school education programmes it can be stated that the majority of the schools visited appropriately included relevant educational areas of FEP in the organisation of education. The expected outcomes of the areas of “Humans and Their World” (the elementary level of basic schools) and “Humans and Nature” (the second level of BSs) were completely incorporated. However, approximately one fifth of basic schools had gaps in the inclusion of expected results. The way in which cross-subject links for these educational areas were elaborated is positive. Schools, with only very rare exceptions, defined cross-subject relations in their SEPs at least at the general level; more than a half of schools further developed cross-subject relations in their SEPs at the level of topics to be taught too. Cross-curricular subject matters of environmental education and culture are most frequently distributed in several subjects.

The compulsory time allotment for the teaching of the aforementioned educational areas according to FEP was usually strengthened by using available lessons for work chosen at the discretion of the school. The schools visited allocated from zero to six available hours to the educational area of “Humans and Their World” at the elementary level, most often it was from one to three hours. At the second level of BSs the “Humans and Nature” educational area was allotted zero to eight available hours, the available hours used at the discretion of the school most often oscillated between one and four hours. Approximately one third of schools provide optional (obligatory) subjects in the area of natural sciences; very rarely schools also offer non-compulsory natural science lessons. In the course of one school year 70 % of schools implemented projects or experimental verifications pertaining to natural sciences to be used as complementary lessons and methods of application of topics to real life situations. Partnerships were observed in more than 80 % of schools. The most frequent partners were, for example, local clubs, associations and unions, environmental movements and associations, environmental centres, public institutions, other basic and/or secondary schools, offices of protected landscape areas and some others. Nearly two thirds of schools involve their pupils in competitions and “Olympics” relating to natural science subjects.