

## KEY-NOTE SPEECH 2

### Is Forestpedagogy capable of tackling “learning for sustainability” concept?

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The separate international survey ROSE (the Relevance of Science Education) asks 16 questions about how the learners consider their experiences with school science. The results vary strongly between 40 countries involved, but for 32 European countries (and Japan), cca. 50% answers indicate that school science fails in many ways. The Report on the results of PISA survey includes also findings stemming from pupils' questionnaires about their interest in science, their self-confidence in science education, the promotion of scientific research and the environmental responsibility. Three-quarters of the participating pupils in Slovakia have at least a small interest in the various areas of science. Although pupils in Slovakia have experienced lower performance in scientific literacy, nevertheless their awareness of the environmental problems is above average. The air pollution problems are perceived as the most sensitive area. The pupils expressed the most pessimistic scenarios linked to air pollution and deforestation. The pupils gained the information on this issue mainly at school, followed by the media, the Internet or the books (20-36%). However, very few students in Slovakia engage in regular activities associated with any independent gathering of information about the natural sciences (13%). The scientific literacy in its complexity should include experimenting skills and the comprehension of the scientific methods so that the pupils can learn to express themselves adequately, understand scientific texts, studies and recommendations. They should be able to use the obtained information to construct their own concepts of knowledge in their critical thinking and problem solving. Therefore, it is necessary now to talk also about the interventions in the organisation of teaching at schools. We have to create more space for integrating the content of science in the learning schedules, not only formally through introducing an educational area “Human and Nature” in the state curricula. The necessary changes of the educational practices inherently involve continuous training of the teachers and a conceptual cooperation with the external environment. An example of good practice is to apply the concept of the forest education in the educational practices and to cooperate with the forest educators, the experts and the scholars in this subject matter.



**Key words:** *Scientific literacy, state education programme, changes in educational practices, forest education, continuous education*

### Ako je lesná pedagogika schopná uchopiť koncept výchovy a vzdelávania pre trvalo udržateľný rozvoj?

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Samostatný medzinárodný výskum ROSE (the Relevance of Science Education) položil respondentom 16 otázok o tom, ako na základe svojej skúsenosti hodnotia prírodovedné vzdelávanie v školách. 40 zapojených krajín malo rôzne výsledky, ale pre 32 európskych krajín (a Japonsko) na základe cca. 50 % odpovedí vyplýva, že prírodovedné vzdelávanie v školách zlyháva vo viacerých faktoroch. Sprava k výsledkom merania PISA zahŕňa aj zistenia, ktoré poskytli žiacke dotazníky o záujme žiakov o prírodné vedy, o ich sebadôvere pri štúdiu prírodovedných predmetov, o podpore vedeckého výskumu a o

