

## Natural Sciences – Organisation, Forms and Methods of Teaching in Visited Basic and Secondary Schools

Organisation, forms and methods of teaching	Basic education									Secondary education								
	BS – elem. lev.			BS – 2nd level			SGSs 6 and 8 lower grades			SGS4+SGS 6 and 8 upper grades			STS			SVS+Lyceum		
	109 *	356		74		246		58		22								
	Frequency of evaluations of organisation, forms and methods of teaching using scale from one to three (%)																	
	+3	2	1-	+3	2	1-	+3	2	1-	+3	2	1-	+3	2	1-	+3	2	1-
Lecture, explanation – effectiveness, appropriateness	67.6	30.4	2.0	66.8	32.3	0.9	67.1	28.6	4.3	62.2	34.3	3.4	81.0	17.2	1.7	63.6	27.3	9.1
Heuristic method – adequacy, appropriateness	71.0	25.8	3.2	60.6	36.9	2.4	62.3	37.7	0.0	62.8	36.0	1.2	67.4	32.6	0.0	52.9	41.2	5.9
Experiments – analysis, explanation, object-teaching	66.7	29.2	4.2	58.7	33.8	7.6	43.6	56.4	0.0	53.7	43.1	3.3	67.9	32.1	0.0	63.6	18.2	18.2
Switching methods during the lesson – their appropriateness	64.8	29.6	5.6	50.1	44.3	5.6	50.7	41.8	7.5	47.1	43.6	9.3	55.4	41.1	3.6	25.0	60.0	15.0
Mathematical model – appropriateness	65.5	27.3	7.3	48.7	47.2	4.1	67.9	32.1	0.0	68.5	30.6	0.9	80.8	19.2	0.0	50.0	37.5	12.5
Abstract imagination – development	62.9	36.0	1.1	56.8	40.6	2.6	63.6	36.4	0.0	68.8	30.7	0.6	62.5	37.5	0.0	60.0	40.0	0.0
Logical thinking (analysis, synthesis, deduction, induction) – development	62.4	35.5	2.2	59.5	39.1	1.5	66.7	31.7	1.6	66.8	31.3	1.9	79.2	20.8	0.0	50.0	33.3	16.7
Critical thinking – development, active absorption of information	57.0	40.0	3.0	54.6	40.5	4.9	61.4	35.1	3.5	57.1	39.8	3.1	62.5	33.9	3.6	38.9	50.0	11.1
Structure of knowledge – terms, context	72.0	26.2	1.9	68.9	29.9	1.1	82.8	15.6	1.6	81.1	18.4	0.5	91.1	8.9	0.0	60.0	40.0	0.0
Assigned tasks support equal opportunities for education – they take into account skills of pupils	84.3	14.8	0.9	75.6	23.8	0.6	85.2	14.8	0.0	85.5	13.5	1.0	78.2	21.8	0.0	75.0	25.0	0.0
Work with texts – independent, popular literature, references, satisfying pupils' interest	63.4	30.1	6.5	52.9	42.2	4.8	55.6	42.2	2.2	55.6	40.0	4.4	46.9	46.9	6.3	45.5	45.5	9.1
Work with ICT – independent, beneficial for development of pupils' personality	53.8	42.3	3.8	57.3	30.8	12.0	58.3	29.2	12.5	60.3	32.4	7.4	52.9	47.1	0.0	57.1	14.3	28.6

\* Number of observed teaching lessons in all schools of the relevant level of education