

TABLE 2. Statistical significance of differences

Group	AS	Experimental 1.	Experimental 2.	Control
Experimental 1.	18.35	/	1.60	6.35*
Experimental 2.	24.35	/	/	5.20*
Control	21.95	/	/	/

* $r < 0.01$ – significance coefficient

The significance of the differences between the groups is determined by using a completely random plan. The value found here F (23.22) indicates existence of very significant differences ($p \leq 0.01$) between the groups examined here. The difference significance between the experimental groups individually is established by using Tukey's test. In this way one finds a very significant difference ($p \leq 0.01$) between K and E1 (6.35), as well as between K and E2 (5.20). The hypothesis that the groups E1, E2 and K are equal is not acceptable, which means that the work following the Enquiry Method has an influence on the process of learning the syllabus elements and quantity of knowledge. Between other groups participating in the experiment no significant differences are found ($p \geq 0.05$).

Based on the analysis of the present results it is possible to conclude that the alternative hypothesis: the IBSE method enlarges the quantity of knowledge for pupils – there are statistically significant differences between the groups, is here confirmed. In other words applying the IBSE method results in a higher quantity of knowledge for pupils; therefore this method appears as an efficient one and it deserves to be recommended to the teachers!

References

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