

Supplementary materials

A. Correlation table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age															
2. Reading comprehension	.10														
3. Math	.09	.59**													
4. EF Inhibition	.18	.03	-.24												
5. EF Working memory	.45**	-.17	-.33*	.59**											
6. Coherence of speech	.13	-.33*	-.30*	.31*	.46**										
7. Science curiosity	-.02	.18	.17	.12	-.04	-.03									
8. Attitude enjoyment	-.21	.18	.21	-.01	-.17	-.08	.57**								
9. Attitude self-efficacy	-.15	.19	.12	-.11	-.18	-.10	.51**	.53**							
10. Pre-test science skills	-.02	.51**	.25	-.02	-.16	-.15	.16	.26*	.10						
11. Post-test science skills	-.05	.57**	.55**	-.21	-.26*	-.37**	.11	.22	.17	.41**					
12. Situational interest	-.01	-.16	.09	-.13	-.11	-.21	.38**	.41**	.21	.16	.23				
13. Pre content knowledge	-.12	.22	.19	-.19	-.15	-.38**	.22	.22	.13	.31*	.41**	.31*			
14. Post content knowledge	-.15	.31*	.23	-.07	.05	-.04	.22	.14	-.01	.17	.45**	.13	.40**		
15. Design skills	.05	.26*	.16	-.26*	-.20	-.27*	.11	-.01	.15	-.07	.24*	.16	.23	.12	

*. Significant at the .05 level; **. Significant at the .01 level

EF = executive function