

Table 2.

## Correlations among various contribution types

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1	1.00																			
2	-	1.00																		
3	.06	-	1.00																	
4	.53*	-	.29	1.00																
5	.11	-	.50*	.16	1.00															
6	.39	-	.15	.13	.08	1.00														
7	.25	-	-.16	.02	-.24	-.09	1.00													
8	.07	-	.31	-.07	.35	-.23	.19	1.00												
9	.02	-	-.17	.32	.15	.07	-.23	-.03	1.00											
10	-	-	-	-	-	-	-	-	-	1.00										
11	.34	-	.14	.29	-.04	.07	.30	.12	.02	-	1.00									
12	.41	-	.35	.21	.47*	.60**	-.25	.30	.22	-	.06	1.00								
13	.41	-	-.43	.27	-.20	.08	.19	-.13	.20	-	.34	.07	1.00							
14	.38	-	.52*	.34	.33	.52*	-.01	.14	-.02	-	.32	.49*	.06	1.00						
15	.46*	-	.01	.26	-.25	.32	.04	-.05	-.13	-	.06	.53*	.16	.15	1.00					
16	.28	-	.22	.46*	-.01	.15	-.17	-.03	.31	-	.19	.51*	.20	.24	.49*	1.00				
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00			
18	.22	-	-.22	-.03	-.31	-.01	.11	-.36	-.07	-	-.21	-.16	.11	.18	-.01	.13	-	1.00		
19	.03	-	-.01	.20	-.03	-.14	.04	.17	-.14	-	.06	-.17	.09	.08	-.19	-.04	-	.48*	1.00	
20	.18	-	.35	.17	.25	.25	-.16	.32	.17	-	.32	.34	.11	.16	-.20	.16	-	.10	.09	1.00

Numerical codes correspond to the following contribution types:

1—Formulating explanatory questions, 2—Formulating design questions, 3—Formulating factual question, 4—Proposing an explanation, 5—Supporting an explanation, 6—Improving an explanation, 7—Seeking an alternative explanation, 8—Proposing/describing an experiment, 9—Identifying a design problem, 10—Thinking of design improvements, 11—Looking for evidence, 12—Providing an evidence or reference to support a particular idea, 13—Providing an evidence or reference to discard a particular idea, 14—Finding new facts, 15—Synthesizing available ideas, 16—Creating analogies, 17—Initiating a rise-above entry, 18—Using diagrams to communicate ideas, 19—Giving an opinion, 20—Acting as a mediator.

**Note:** The contribution types that were observed in less than 15% of participants were excluded from analyses (see variables 2, 10 and 17)

\*  $p < .05$ . \*\*  $p < .01$ .