## 1 Summaries of Parametric Statistics Analysisfor the gains in skill/knowledge estimates in the second empirical study

Table 1: Summary of two-way ANOVA results for the gains in skill/knowledge estimates in the second empirical study

	Sum Sq	Df	F value	Pr(>F)	Sig
Type.(Intercept)	0.004	1	0.276	0.602	
Type.Type	0.013	1	0.923	0.343	
Type.CLRole	0.053	1	3.636	0.064	
Type.Type:CLRole	0.039	1	2.650	0.112	
Type.Residuals	0.555	38			

Signif. codes: 0 "\*\*" 0.01 "\*" 0.05

Table 2: Descriptive statistics and Tukey post-hoc test results for the gains in skill/knowledge estimates in the second empirical study

	Z		lsmean	$_{ m SE}$	df	lwr.CI	upr.CI	t.ratio	p.value	p.ajd	<i>p</i> 0	sig	mag
Type.non-gamified	26	0.012	0.009	0.026	38	-0.043	0.061						
Type.ont-gamified	16	0.006	-0.032	-0.035 38 $-$	38	-0.103	0.038						
Type.non-gamified - ont-gamified	42	0.006	0.042	0.043		-0.072	0.083	0.961	0.343	0.884	0.044		
Type.non-gamified.Apprentice	18	0.015	0.015	0.028	38	-0.042	0.073						
Type.ont-gamified.Apprentice	12	0.044	0.044	0.035	38	-0.026	0.115						
Type.non-gamified.Apprentice - ont-gamified.Apprentice	30	-0.029	-0.029	0.045		-0.150	0.092	-0.642	0.525	0.918	-0.227		
Type.non-gamified.Master	$\infty$	0.003	0.003	0.043	38	-0.083	0.090						
Type.ont-gamified.Master	4	-0.109	-0.109	0.060	38	-0.231	0.014						
Type.non-gamified.Master - ont-gamified.Master	12	0.112	0.112	0.074		-0.087	0.311	1.515	0.138	0.439	0.929		

Signif. codes: 0 "\*\*" 0.01 "\*" 0.05