

1 Summaries of Parametric Statistics Analysis- for the gains in skills/knowledge estimates in the pilot empirical study

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

	Sum Sq	Df	F value	Pr(>F)	Sig
Type.(Intercept)	105.704	1	7.021	0.017	
Type.Type	3.657	1	0.243	0.629	
Type.CLRole	35.938	1	2.387	0.142	
Type.Type:CLRole	0.280	1	0.019	0.893	
Type.Residuals	240.873	16			

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05

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

	N	mean	lsmean	SE	df	lwr.CI	upr.CI	t.ratio	p.value	p.adj	g	sig	mag
Type.non-gamified	8	2.320	1.994	1.417	16	-1.009	4.997						
Type.ont-gamified	12	3.423	2.905	1.188	16	0.387	5.424						
Type.non-gamified - ont-gamified	20	-1.104	-0.911	1.849		-4.858	2.650	-0.493	0.629	0.542	-0.268		
Type.non-gamified.Apprentice	5	3.296	3.296	1.735	16	-0.382	6.975						
Type.ont-gamified.Apprentice	8	4.460	4.460	1.372	16	1.552	7.368						
Type.non-gamified.Apprentice - ont-gamified.Apprentice	13	-1.164	-1.164	2.212		-7.492	5.165	-0.526	0.606	0.952	-0.264		
Type.non-gamified.Master	3	0.692	0.692	2.240	16	-4.057	5.441						
Type.ont-gamified.Master	4	1.351	1.351	1.940	16	-2.762	5.463						
Type.non-gamified.Master - ont-gamified.Master	7	-0.659	-0.659	2.963		-9.137	7.819	-0.222	0.827	0.996	-0.166		

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05