

Statistical Analysis in the pilot study for students with effective participation

September 30, 2018

Table 1: Two-way ANOVA and Scheirer-Ray-Hare in the pilot study for students with effective participation

	Sum Sq	Df	F value	Pr(>F)	Sig	Df	Sum Sq	H	p.value	Sig
gain.theta.(Intercept)	126.330	1	35.770	0.000						
gain.theta.Type	3.087	1	0.874	0.363		1	1.817	0.047	0.828	
gain.theta.CLRole	42.192	1	11.947	0.003	**	1	207.161	5.388	0.020	*
gain.theta.Type:CLRole	0.427	1	0.121	0.732		1	2.621	0.068	0.794	
gain.theta.Residuals	60.040	17				17	557.400			

Signif. codes: 0 “***” 0.01 “**” 0.05

Table 2: Summary of Pair wilcoxon in the pilot study for students with effective participation

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
gain.theta.Type:CLRole.greater.1	non-gamified.Apprentice	5	3.21	6	30	15	2.24	0.018	0.791	large
gain.theta.Type:CLRole.greater.2	non-gamified.Master	3	0.88	2	6	15	2.24	0.018	0.791	large
gain.theta.Type:CLRole.two.sided.1	non-gamified.Apprentice	5	3.21	6	30	15	2.24	0.036	0.791	large
gain.theta.Type:CLRole.two.sided.2	non-gamified.Master	3	0.88	2	6	15	2.24	0.036	0.791	large