

Supplementary Table 4: Cronbach Alpha - Critical Thinking

PRE-SURVEY: Critical Thinking

Student	Cor	Survey	Q1	Q2	Q3	Q4	Total scores
109AR	1		3	3	2	2	10
021X0	1		4	5	3	5	17
116JP	1		3	2	2	2	9
3131LI	1		2	2	2	2	8
3013SA	1		2	3	1	1	7
104AA	1		2	2	2	1	7
214MA	1		2	3	1	3	9
5323OT	1		3	3	3	3	12
1127EP	1		3	5	5	2	15
0227AA	1		3	2	1	2	8
2027LP	1		2	2	2	1	7
1023JE	1		2	2	1	2	7
1110GE	1		2	1	2	1	6
0220XA	1		3	5	2	2	12
109SH	1		3	3	2	2	10
2127AN	1		2	1	1	1	5
107KI	1		4	4	3	4	15
017XA	1		2	2	1	1	6
1022AA	1		2	2	2	2	8
121GA	1		2	1	2	1	6
1214SO	1		1	1	1	1	4
1225DA	1		2	1	2	1	6
1113OR	1		3	2	2	2	9
1029AA	1		1	1	1	1	4
0125MU	1		3	1	3	3	10
3127RA	1		3	2	2	3	10
11PCM	1		2	2	3	2	9
529AP	1		2	1	2	1	6
5212LE	1		1	2	1	1	5
1218WO	1		1	1	1	1	4
129GN	1		2	2	2	2	8
026AB	1		1	1	1	1	4
0226NA	1		2	2	3	2	9
1026S1	1		1	2	2	1	6
2225EA	1		3	3	2	1	9
025MU	1		2	2	3	1	8
116XO	1		2	3	2	2	9
01712KL	1		2	2	2	1	7
0123MA	1		3	3	3	2	11
1028PU	1		2	2	3	2	9
206EO	1		1	2	2	2	7
0121KO	1		2	2	2	2	8
0116XI	1		5	1	2	2	10

Number of Questions	4
Sum of item variances	3.5289
Variance of total score	9.2662
Cronbach alpha	0.8256

0125CD	1	2	2	2	1	7
211JE	1	4	4	4	4	16

VAR.P 0.79 1.15 0.73 0.9

POST-SURVEY: Critical Thinking

Student	Coc Survey	Q1	Q2	Q3	Q4	Total scores		
109AR	2	2	2	1	2	7	Number of Questions	4
021X0	2	3	5	3	2	13	Sum of item variences	3.1556
116JP	2	3	2	3	2	10	Variance of total score	8.376
3131LI	2	3	3	2	2	10	Cronbach alpha	0.831
3013SA	2	3	2	2	2	9		
104AA	2	1	2	2	1	6		
214MA	2	2	1	2	1	6		
5323OT	2	3	3	3	3	12		
1127EP	2	3	3	2	2	10		
0227AA	2	2	2	1	1	6		
2027LP	2	2	2	2	2	8		
1023JE	2	2	2	2	1	7		
1110GE	2	2	2	2	1	7		
0220XA	2	5	5	5	5	20		
109SH	2	3	3	2	2	10		
2127AN	2	1	1	1	1	4		
107KI	2	2	2	1	1	6		
017XA	2	2	2	1	1	6		
1022AA	2	2	2	2	1	7		
121GA	2	2	2	2	2	8		
1214SO	2	1	1	1	1	4		
1225DA	2	2	3	2	1	8		
1113OR	2	2	3	2	2	9		
1029AA	2	1	1	1	1	4		
0125MU	2	1	2	4	2	9		
3127RA	2	2	3	3	2	10		
11PCM	2	3	2	3	2	10		
529AP	2	2	2	2	1	7		
5212LE	2	1	1	1	1	4		
1218WO	2	2	5	1	1	9		
129GN	2	2	2	3	2	9		
026AB	2	2	1	2	2	7		
0226NA	2	2	2	3	2	9		
1026S1	2	2	2	2	1	7		
2225EA	2	4	4	2	2	12		
025MU	2	3	2	1	3	9		
116XO	2	2	1	1	2	6		

01712KL	2	2	1	2	1	6
0123MA	2	3	3	3	2	11
1028PU	2	3	3	3	3	12
206EO	2	1	2	2	2	7
0121KO	2	2	2	2	2	8
0116XI	2	1	1	1	2	5
0125CD	2	1	2	2	1	6
211JE	2	3	2	3	3	11

VAR.P 0.72 1.03 0.77 0.6