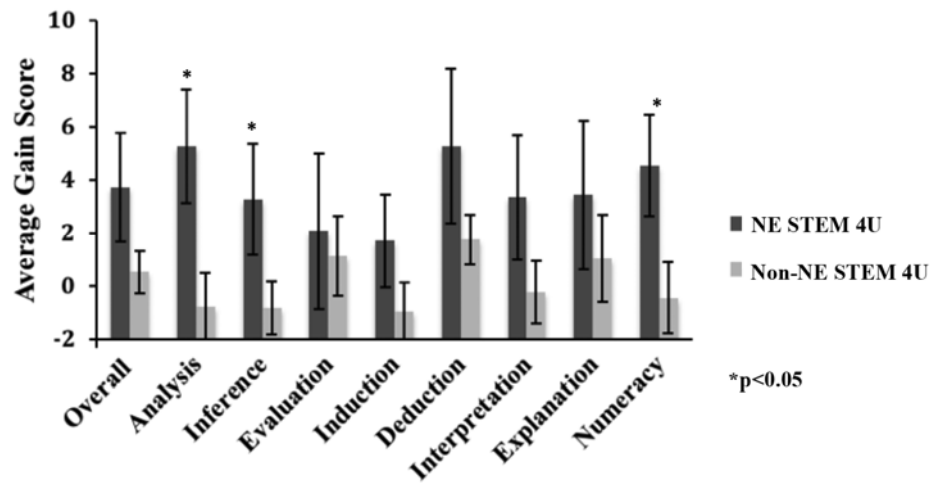


Supplemental Material

CBE—Life Sciences Education

Nelson *et al.*



Supplemental Figure 1. Summary of average gain scores for NE STEM 4U mentors versus non-mentor majors that did not participate (all other factors normalized). Average gain scores (i.e., difference between post- and pre-test) and 95% confidence intervals were calculated for the overall score and eight subscale scores of the CCTST for both NE STEM 4U mentors and non-mentor life science majors. Notably, average mentor gains were at least two points greater than any non-mentor gains for all components of the CCTST except evaluation. Average gains were significantly different between mentors and non-mentors for: analysis, inference, and numeracy.

Supplemental Table 1. Demographics of NE STEM 4U mentors and non-mentors.

Student Type	Sex		Ethnicity White/Black/Hispanic/Asian	Year in School Fr/Soph/Jr/Se
	Male	Female		
Mentor (n=11)	5	6	7/0/1/3	1/4/2/4
Non-mentor (n=26)	12	14	19/1/1/5	3/8/5/10

Supplemental Table 2. Descriptive statistics of CCTST scores for NE STEM 4U mentors and non-mentors life science majors who participated in this study.

	Mentor (N= 11)		Non-mentor (N = 26)	
	Pre-test (mean ± SE)	Post-test (mean ± SE)	Pre-test (mean ± SE)	Post-test (mean ± SE)
Overall	78.55 ± 2.87	82.27 ± 1.76	73.19 ± 1.48	73.73 ± 1.51
Analysis	78.55 ± 3.02	83.82 ± 2.31	72.42 ± 1.86	71.65 ± 1.86
Inference	81.18 ± 2.86	84.45 ± 1.80	73.69 ± 1.83	72.88 ± 1.53
Evaluation	76.09 ± 2.64	78.18 ± 2.17	72.23 ± 1.28	73.38 ± 1.44
Induction	81.91 ± 2.80	83.64 ± 1.82	76.88 ± 1.31	75.96 ± 1.60
Deduction	75.73 ± 2.90	81.00 ± 2.51	70.62 ± 1.52	72.38 ± 1.33
Interpretation	81.82 ± 2.63	85.18 ± 2.42	75.27 ± 1.51	75.04 ± 1.71
Explanation	76.64 ± 2.99	80.09 ± 1.88	73.92 ± 1.92	74.96 ± 1.75
Numeracy	77.09 ± 2.89	81.64 ± 2.35	70.12 ± 1.75	69.69 ± 1.36