成大 iGEM X 展心計劃 feedback analysis

dataset:
https://docs.google.com/spreadsheets/d/15Hcf8d9mxynQVOaMWqzAcIra9eRw-wP81Fj8oVOibio/edit?gid=377769428#gid=377769428

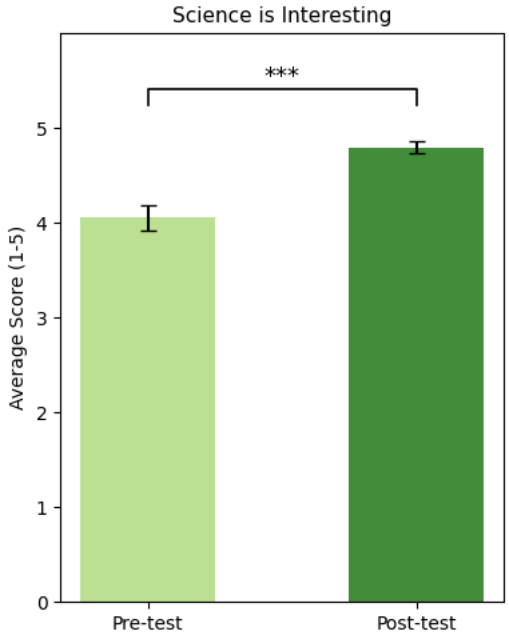
Q1 Science is Interesting

Pre-Test Mean Score: 4.06/5.00

Post-Test Mean Score: 4.80/5.00

Net Growth Contribution: +0.74

Statistical Significance: t = 9.84, p < 0.001 (Significant, *)



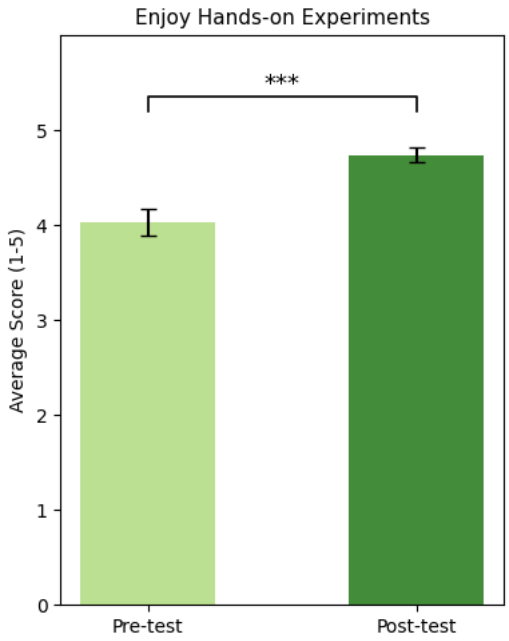
Q2 Enjoy Hands-on Experiments

Pre-Test Mean Score: 4.03/5.00

Post-Test Mean Score: 4.74/5.00

Net Growth Contribution: +0.71

Statistical Significance: t = 8.93, p < 0.001 (Significant, *)



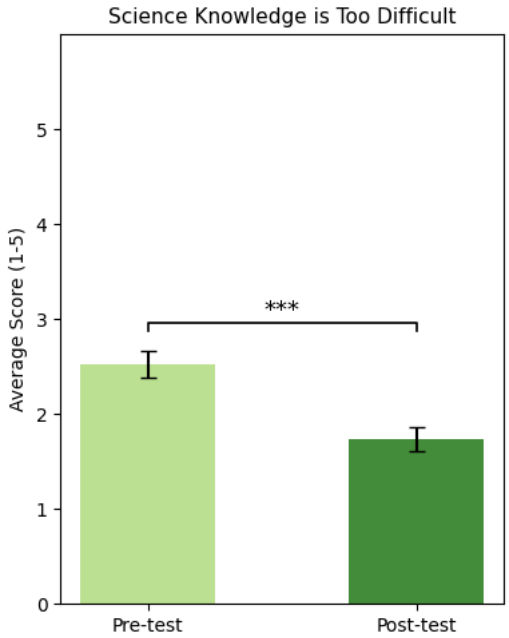
Q3 Science Knowledge is Too Difficult (reverse-scored item — lower is better)

Pre-Test Mean Score: 2.53/5.00

Post-Test Mean Score: 1.73/5.00

Net Growth Contribution: -0.80

Statistical Significance: t = -8.28, p < 0.001 (Significant, *), Cohen's d = -0.79



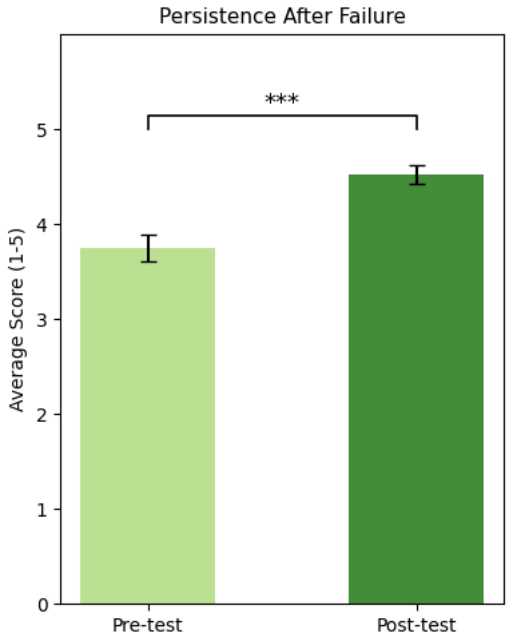
Q4 Persistence After Failure

Pre-Test Mean Score: 3.75/5.00

Post-Test Mean Score: 4.53/5.00

Net Growth Contribution: +0.78

Statistical Significance: t = 8.93, p < 0.001 (Significant, *)



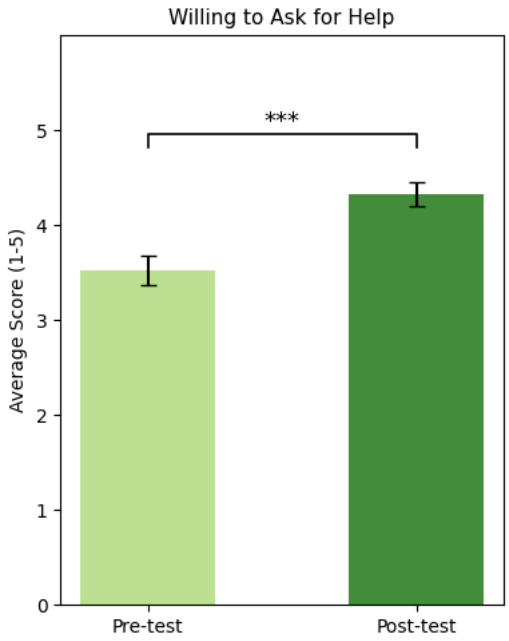
Q5 Willing to Ask for Help

Pre-Test Mean Score: 3.53/5.00

Post-Test Mean Score: 4.33/5.00

Net Growth Contribution: +0.81

Statistical Significance: t = 7.73, p < 0.001 (Significant, *), Cohen's d = 0.74



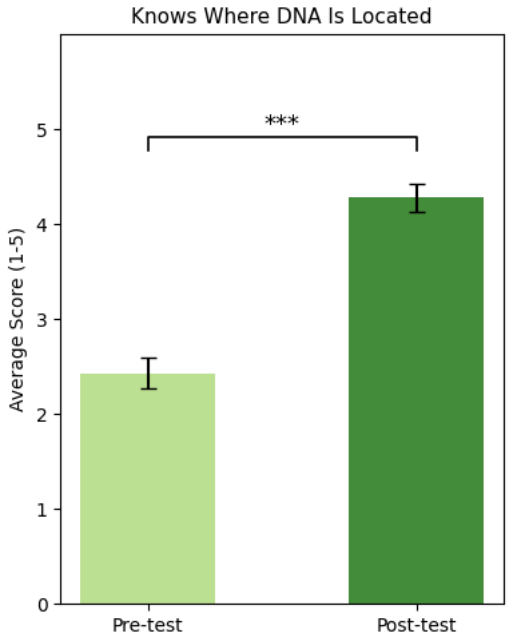
Q6 Knows Where DNA Is Located

Pre-Test Mean Score: 2.43/5.00

Post-Test Mean Score: 4.28/5.00

Net Growth Contribution: +1.85

Statistical Significance: t = 16.71, p < 0.001 (Significant, *), Cohen's d = 1.60



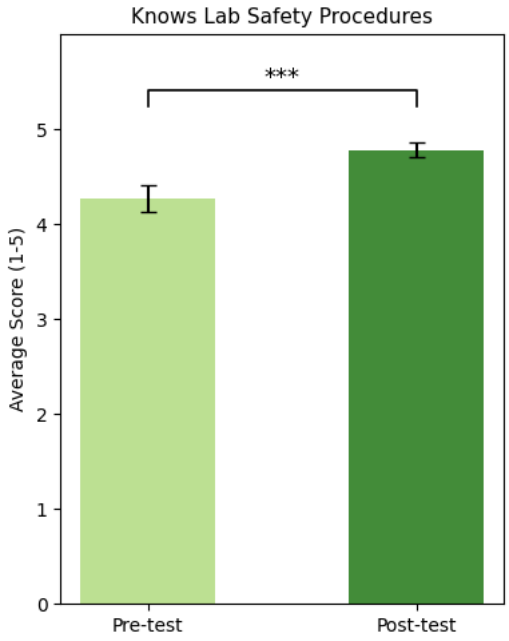
Q7 — Knows Lab Safety Procedures

Pre-Test Mean Score: 4.28/5.00

Post-Test Mean Score: 4.78/5.00

Net Growth Contribution: +0.51

Statistical Significance: t = 6.15, p < 0.001 (Significant, *), Cohen's d = 0.59



Overall Graph

