**Appendix 4.** Pre-/post-test questions about students attitudes and beliefs of teamwork and average student responses during academic year 2105-2016. Likert five-level answer scale: 1 = Totally disagree, 2= Somewhat disagree, 3=Neither agree nor disagree, 4=Somewhat agree, and 5 = Totally Agree. Using paired t-tests, pre-post differences were significant for questions 1-3 in 2015 and for 1-4 in 2016 (range of t-stats = -2.04 to -2.88, p-values range from 0.002 to 0.02, α = 0.05). There was also no difference between 2015 and 2016 (one-tailed T-test t = -0.48 – 1.15, p = 0.13-0.37, α = 0.05). Sample sizes were 108 and 88 for 2015 and 2016, respectively. Standard errors are provided under each value within the parentheses.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question Prompt – *“I believe that…”*** | **Average Student Response** | | | | | | | | |
| **2015 Pre** | **2015 Post** | | |  | **2016 Pre** | | | **2016 Post** |
| 1. working in a team of 3-5 students is an effective method of learning. | 4.3  (0.09) | | 4.6  (0.07) |  | | | 4.1  (0.10) | 4.3  (0.10) | |
| 1. the work resulting from a team of 3-5 students is better than that of 1 student working independently. | 4.2  (0.09) | | 4.5 (0.07) |  | | | 4.0  (0.11) | 4.3 (0.10) | |
| 1. the work resulting from a team of 3-5 students with different perspectives, skills, and knowledge is better than that of a team of 3-5 students with similar perspectives, skills, and knowledge. | 4.3  (0.09) | | 4.5 (0.07) |  | | | 4.2  (0.09) | 4.4 (0.08) | |
| 1. the abilities and skills to work effectively in a team of 3-5 students (such as: team building, communication, leadership) can be gained by training and practice. | 4.4  (0.09) | | 4.5 (0.08) |  | | | 4.4 (0.08) | 4.5 (0.08) | |
| 1. the abilities and skills to work effectively in a team of 3-5 students (such as: team building, communication, leadership) are important for post-graduate success in the sciences. | 4.7 (0.07) | | 4.9 (0.05) |  | | | 4.8  (0.06) | 4.8 (0.06) | |
| **Cronbach’s alpha** | 0.76 | | 0.67 |  | | | 0.77 | 0.77 | |