**Appendix**

**Table A.1**

*Table of Statistical Investigative Process Element Overlap by Grade Level (N=1569)*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Element Overlap** | **K** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **Overall** |
| Q&C | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 4 |
| Q&A | 0 | 41 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 45 |
| Q&I | 0 | 43 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 46 |
| Q&C&A | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| Q&C&I | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| Q&A&I | 0 | 41 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 44 |
| Q&C&A&I | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| C&A | 48 | 6 | 46 | 47 | 4 | 6 | 7 | 137 | 36 | 337 |
| C&I | 1 | 0 | 1 | 3 | 2 | 4 | 48 | 136 | 37 | 232 |
| C&A&I | 1 | 0 | 1 | 3 | 2 | 4 | 4 | 84 | 35 | 134 |
| A&I | 3 | 46 | 8 | 10 | 42 | 9 | 158 | 154 | 140 | 570 |
| # of LEs with links | 50 | 54 | 53 | 55 | 44 | 11 | 206 | 259 | 143 | 875 |
| % of LEs with links | 46.73 | 80.60 | 44.92 | 47.41 | 61.97 | 15.94 | 50.24 | 66.75 | 64.13 | 55.77 |

Note. The four statistical investigative process elements are formulate question (Q), collect/consider data (C), analyze data (A), and interpret data (I). The overlap between these elements are shown for the learning expectancies (LEs) across all states.