## Appendix K

Differential Item Functioning Results

Table K-1. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored-ELA

| Grade | Group |  | ItemType | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total Favoring |  | Total | Favoring |  |
|  | Reference |  |  |  |  | Total | Reference | Focal | Reference | Focal |
| 3 | Male | Female |  | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Male | Female | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 1 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | $\begin{aligned} & \text { Item } \\ & \text { Type } \end{aligned}$ | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  |  | Favoring |  | Total | Favoring |  |
|  |  |  |  |  | Total | Reference | Focal |  | Reference | Focal |
| 5 | Male | Female | MC | 24 | 3 | 2 | 1 | 1 | 1 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | Male | Female | MC | 24 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 24 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | $\begin{aligned} & \text { Item } \\ & \text { Type } \end{aligned}$ | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total |  | Favoring |  | Total | Favoring |  |
|  | Reference | Focal |  |  | Reference | Focal |  | Reference | Focal |
| 7 | Male | Female | MC | 26 | 4 | 3 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 26 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 26 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 26 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | Male | Female | MC | 24 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 24 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | ItemType | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Favoring |  | Total | Favoring |  |
|  | Reference |  |  |  | Total | Reference |  | Focal | Reference | Focal |
| 8 | White | Hispanic/Latino |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | Male | Female | MC | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 21 | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 21 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | WP | 2 | 0 | 0 | 0 | 0 | 0 | 0 |

Table K-2. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored-Mathematics

| Grade | Group |  | Item | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal | $\underset{\mathrm{e}}{\text { Typ }}$ |  | Total | Favo <br> Reference | Focal | Total | Reference | Focal |
| 3 | Male | Female | MC | 16 | 2 | 1 | 1 | 1 | 1 | 0 |
|  |  |  | OR | 24 | 4 | 3 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | African American/Black | MC | 16 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 24 | 3 | 1 | 2 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 24 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 16 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | Male | Female | MC | 11 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 29 | 3 | 2 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 29 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 29 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 11 | 2 | 1 | 1 | 0 | 0 | 0 |
|  | White |  | OR | 29 | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 11 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 29 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 29 | 1 | 0 | 1 | 0 | 0 | 0 |
| 5 | Male | Female | MC | 17 | 2 | 1 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 23 | 1 | 1 | 0 | 1 | 1 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 23 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 23 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 23 | 4 | 4 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 23 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 23 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  | Item | Number of Items | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference |  | Typ |  | Total | Reference | Focal | Total | Favo <br> Reference | Focal |
| 6 | Male | Female | MC | 15 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 25 | 3 | 2 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 15 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 15 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | White |  | OR | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 15 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 25 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Male | Female | MC | 19 | 5 | 3 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 19 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 19 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 19 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | Male | Female | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 21 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | White |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |


| Grade | Group |  |  |  | Number "Low" |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal | $\underset{\mathrm{e}}{\text { Typ }}$ | of Items | Total | Favo <br> Reference | Focal | Total | Favo <br> Reference | Focal |
| 10 | Male | Female | MC | 20 | 3 | 2 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 20 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 1 | 0 | 1 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 20 | 2 | 1 | 1 | 0 | 0 | 0 |
|  | White |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 22 | 0 | 0 | 0 | 0 | 0 | 0 |

Table K-3. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored-STE

| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" Favoring |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference |  |  |  |  |  |  | Total | Favori |  |
|  |  |  |  |  | Total | Reference | Focal | Total | Reference | Focal |
| 5 | Male | Female | MC | 22 | 2 | 1 | 1 | 1 | 1 | 0 |
|  |  |  | OR | 19 | 2 | 1 | 1 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 19 | 2 | 2 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 22 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 22 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 19 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | Male | Female | MC | 20 | 3 | 3 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 5 | 3 | 2 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 2 | 2 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 20 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 1 | 0 | 1 | 0 | 0 | 0 |

Table K-4. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored-Biology

| Grade | Group |  | Item <br> Type | Number of Items | Number "Low" Favoring |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  |  |  |  | Total | Favor |  |
|  |  |  |  |  | Total | Reference | Focal | Total | Reference | Focal |
| HS | Male | Female | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | African American/Black | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Hispanic/Latino | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 21 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 21 | 0 | 0 | 0 | 0 | 0 | 0 |

Table K-5. Number of Items Classified as "Low" or "High" DIF, Overall and by Group Favored-Introductory Physics

| Grade | Group |  | $\begin{aligned} & \text { Item } \\ & \text { Type } \end{aligned}$ | Number of Items |  Number "Low" <br> Total Favoring |  |  | Number "High" |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reference | Focal |  |  |  |  |  | Total | Favor |  |
|  |  |  |  |  |  | Reference | Focal |  | Reference | Focal |
| HS | Male | Female | MC | 28 | 5 | 3 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 14 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Not EL/FEL | EL/FEL | MC | 28 | 3 | 1 | 2 | 0 | 0 | 0 |
|  |  |  | OR | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Not Low Income | Low Income | MC | 28 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | White | Hispanic/Latino | MC | 28 | 1 | 0 | 1 | 0 | 0 | 0 |
|  |  |  | OR | 14 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Students without Disabilities | Students with Disabilities | MC | 28 | 1 | 1 | 0 | 0 | 0 | 0 |
|  |  |  | OR | 14 | 0 | 0 | 0 | 0 | 0 | 0 |

