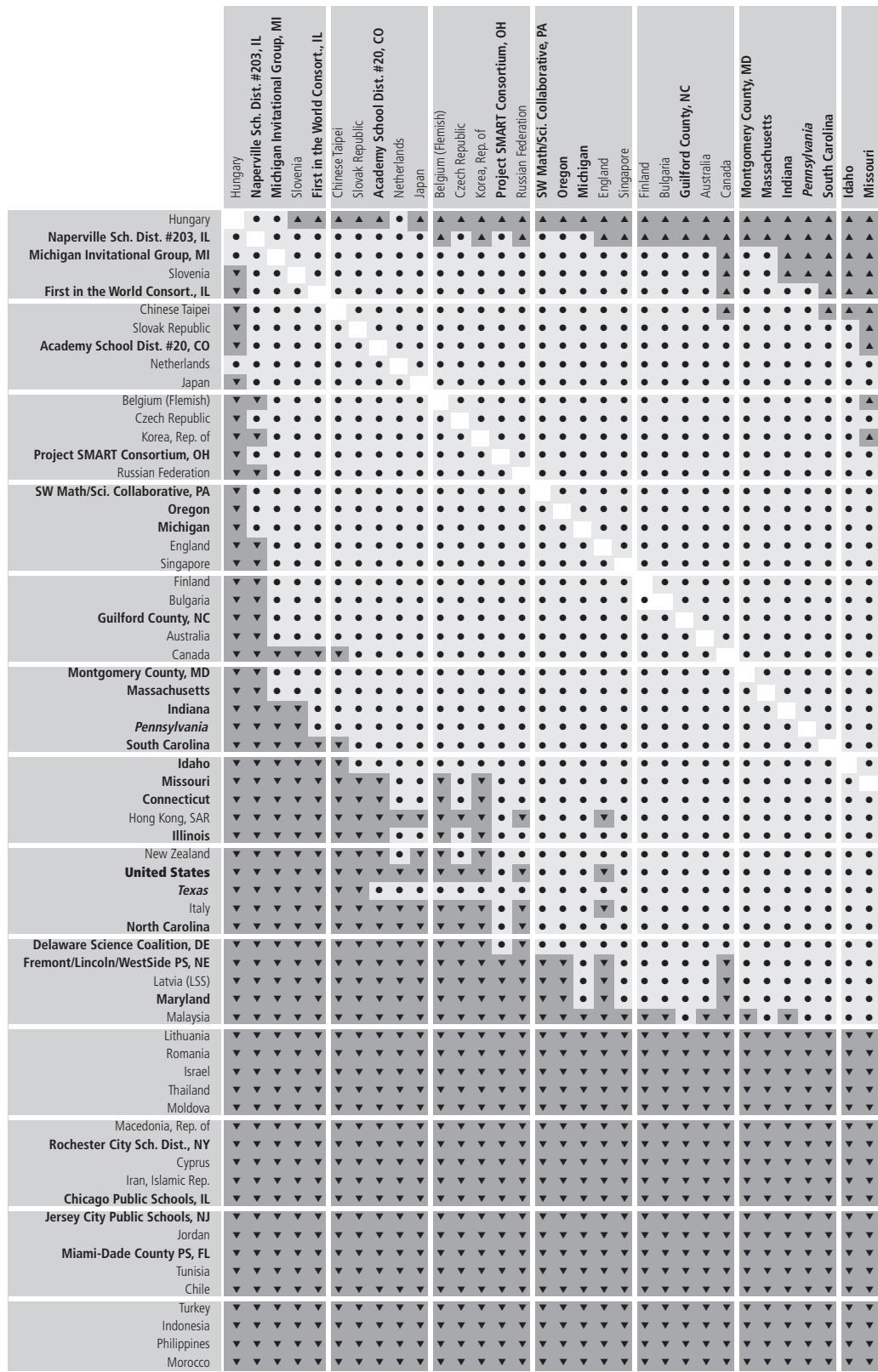


## APPENDIX

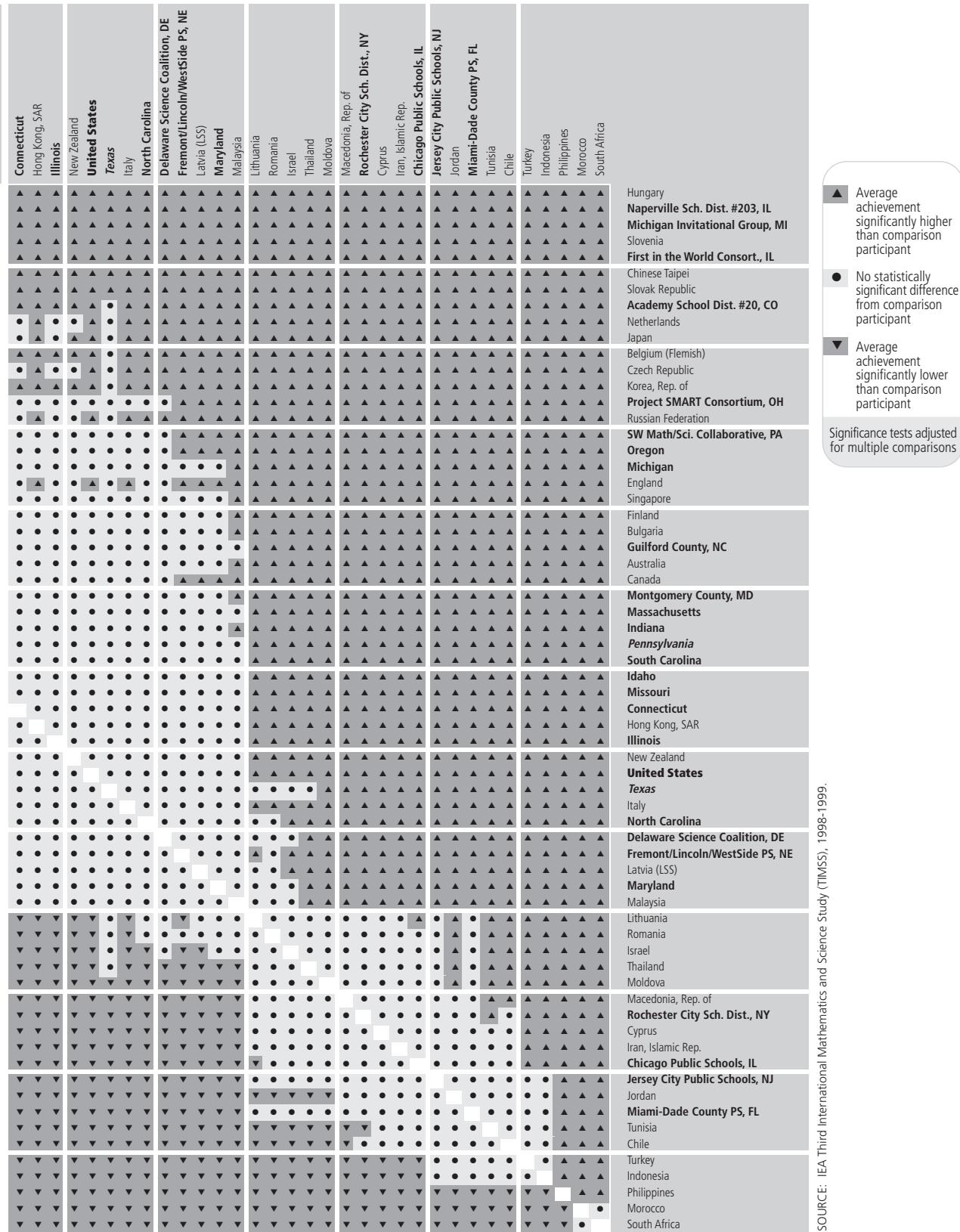
# B

### Multiple Comparisons of Average Achievement in Science Content Areas

**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.

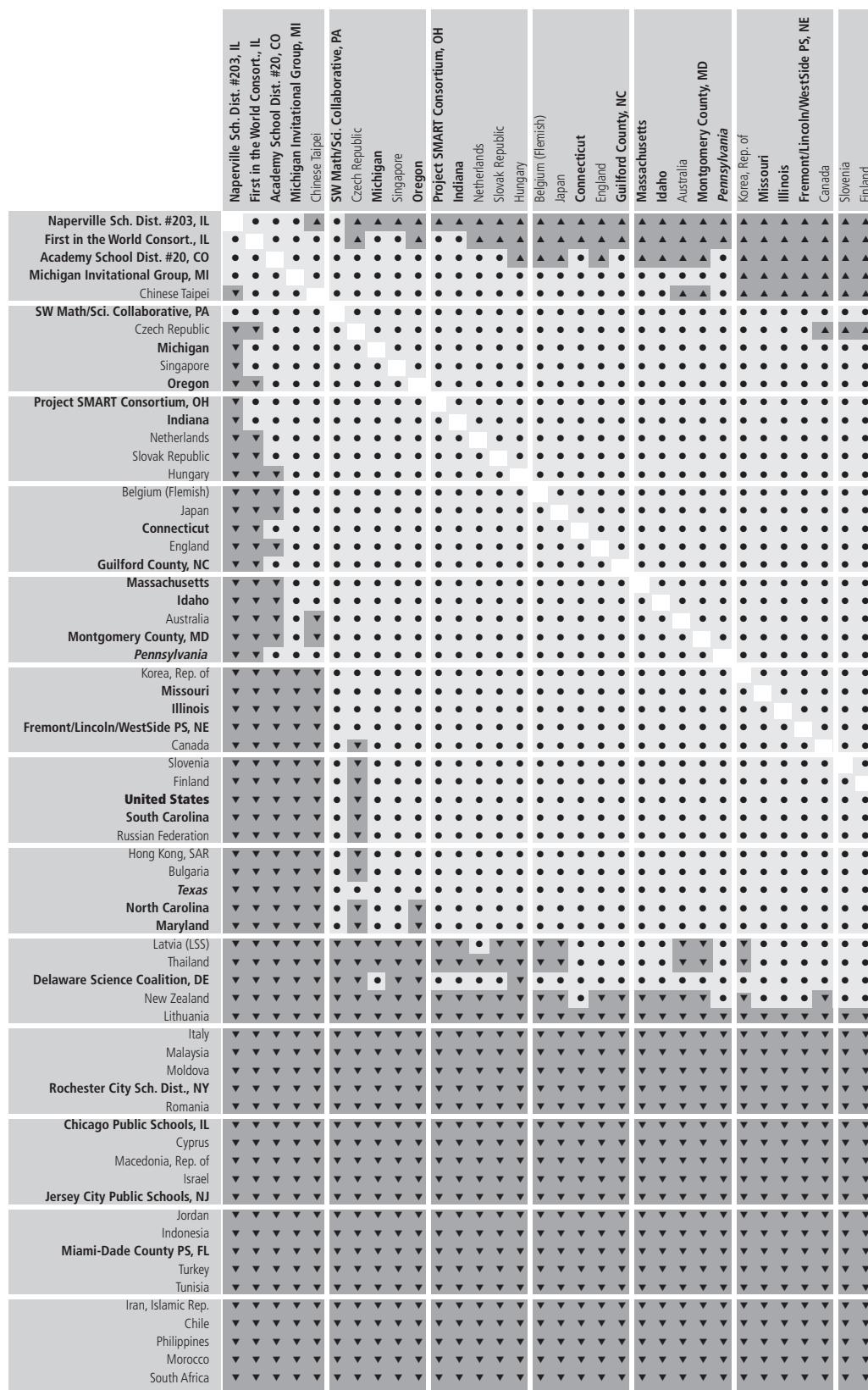


States in *italics* did not fully satisfy guidelines for sample participation rates (see Appendix A for details).

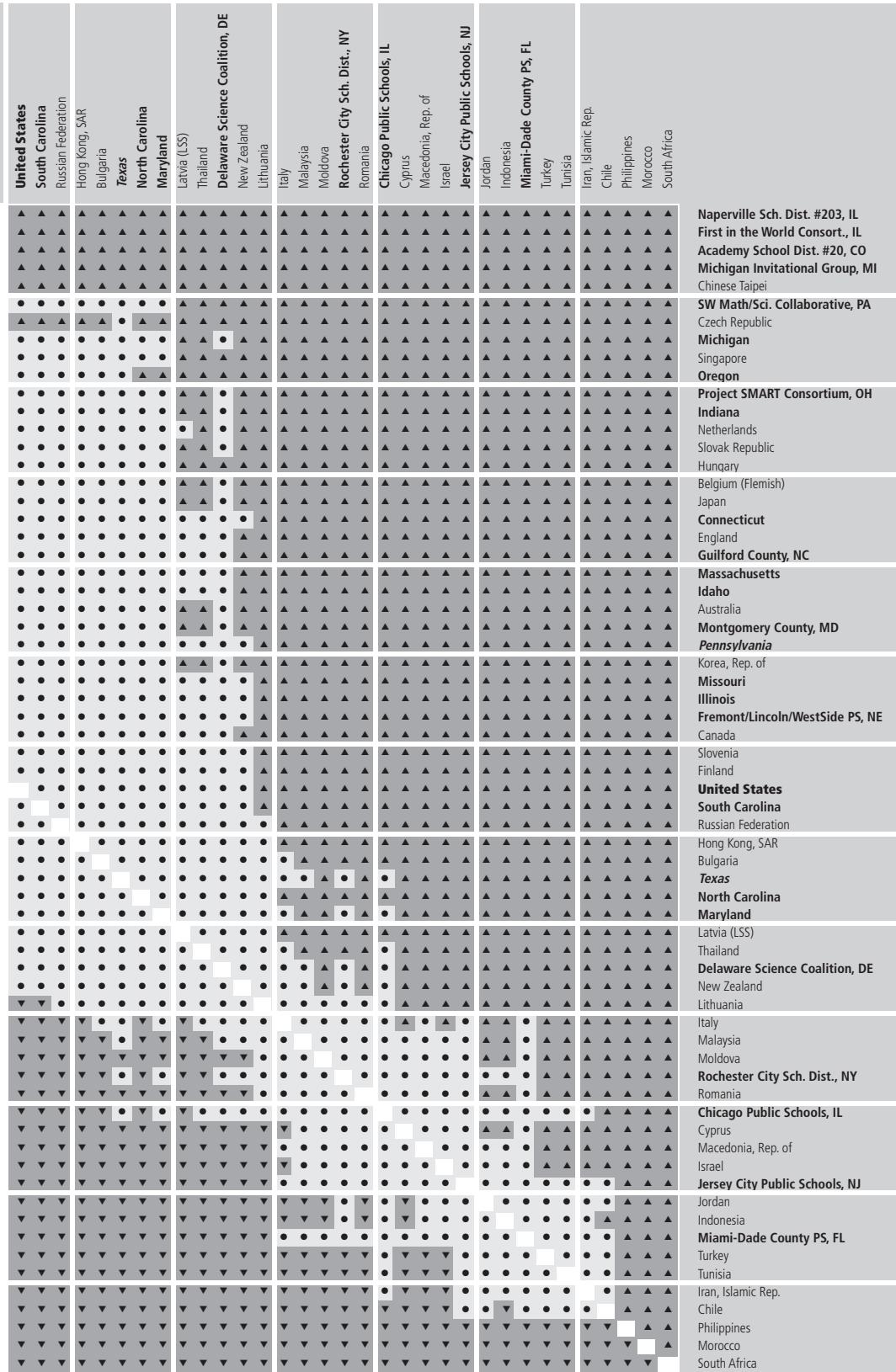


SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.

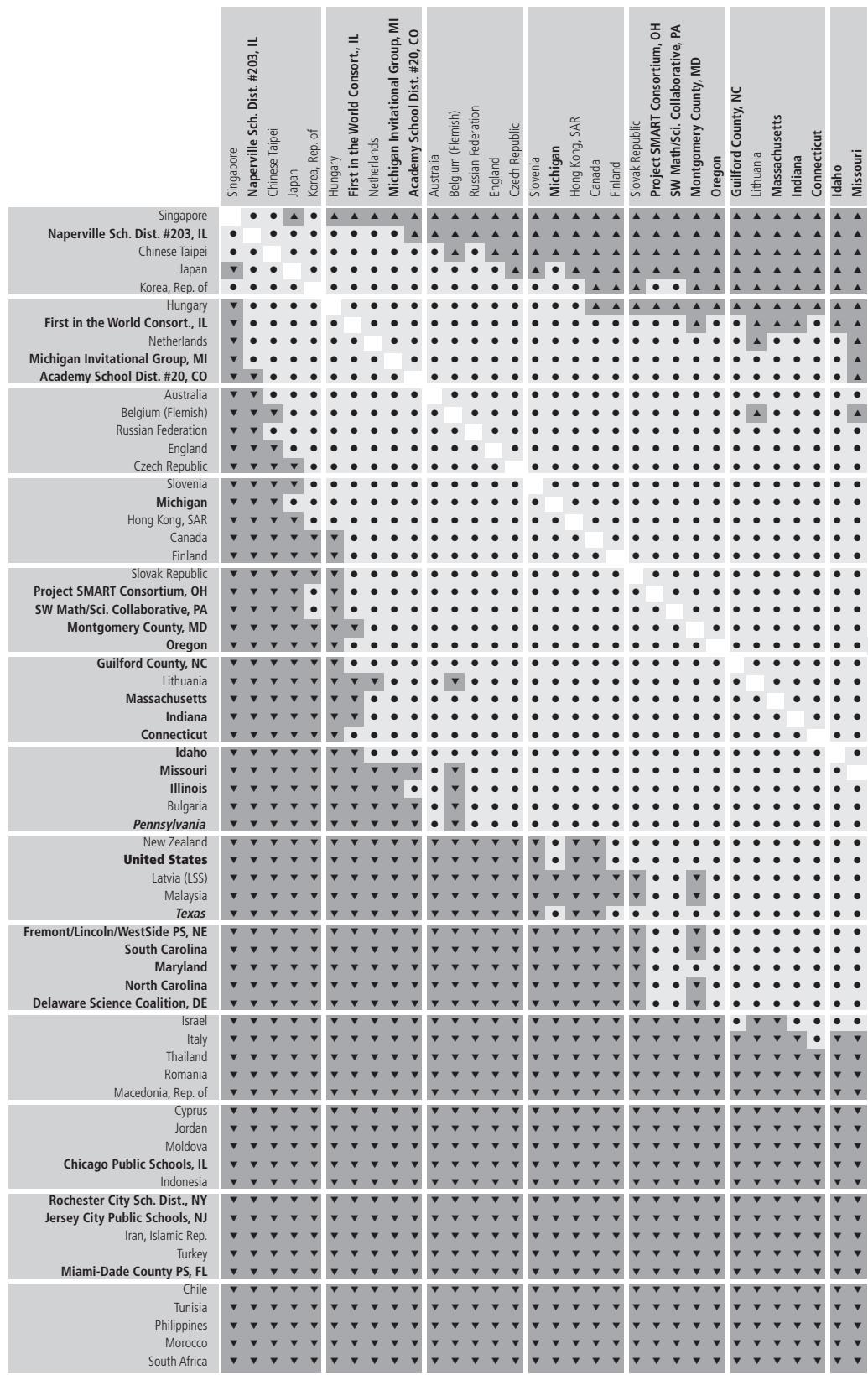


States in *italics* did not fully satisfy guidelines for sample participation rates (see Appendix A for details).



SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.





SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

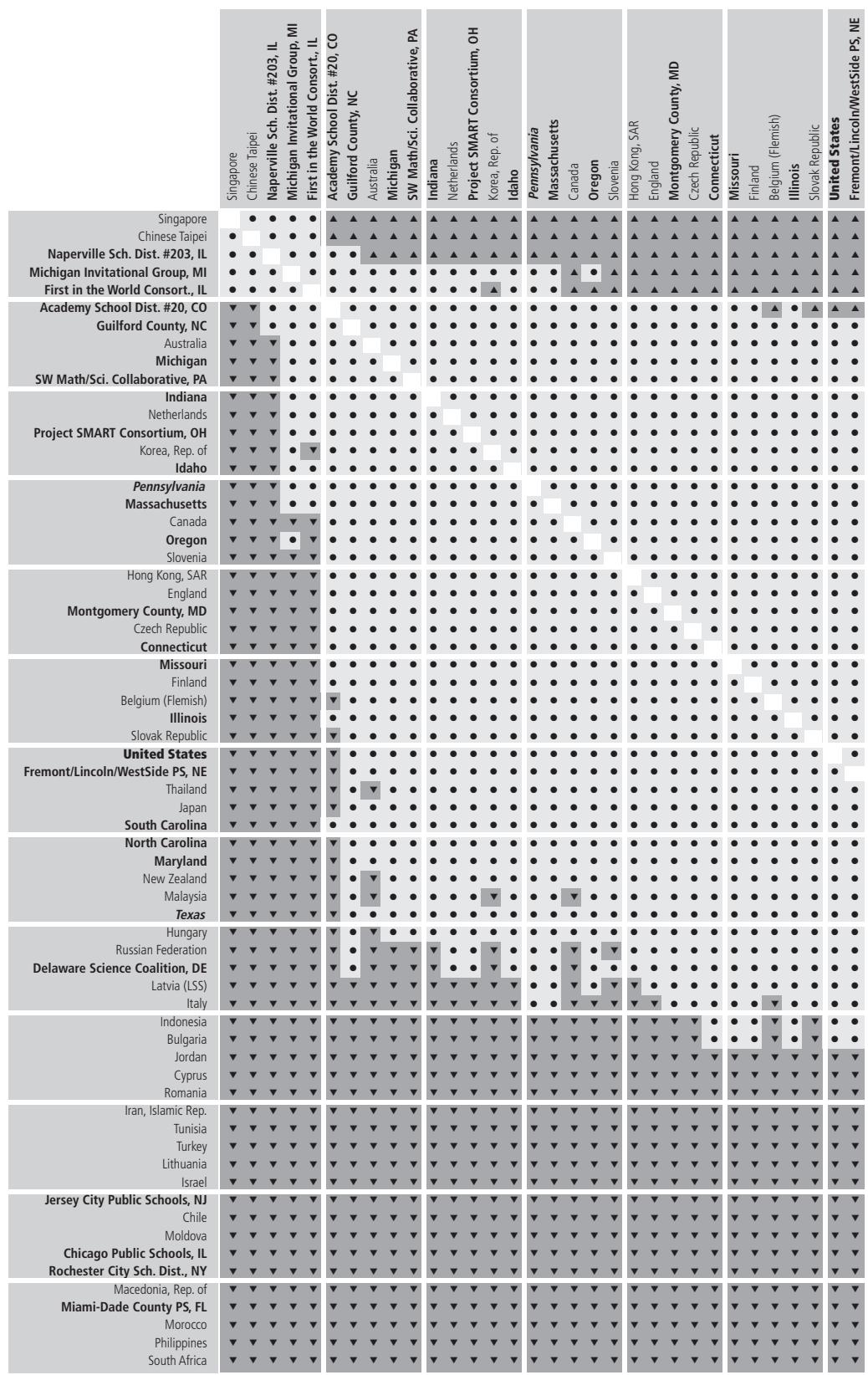
**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.

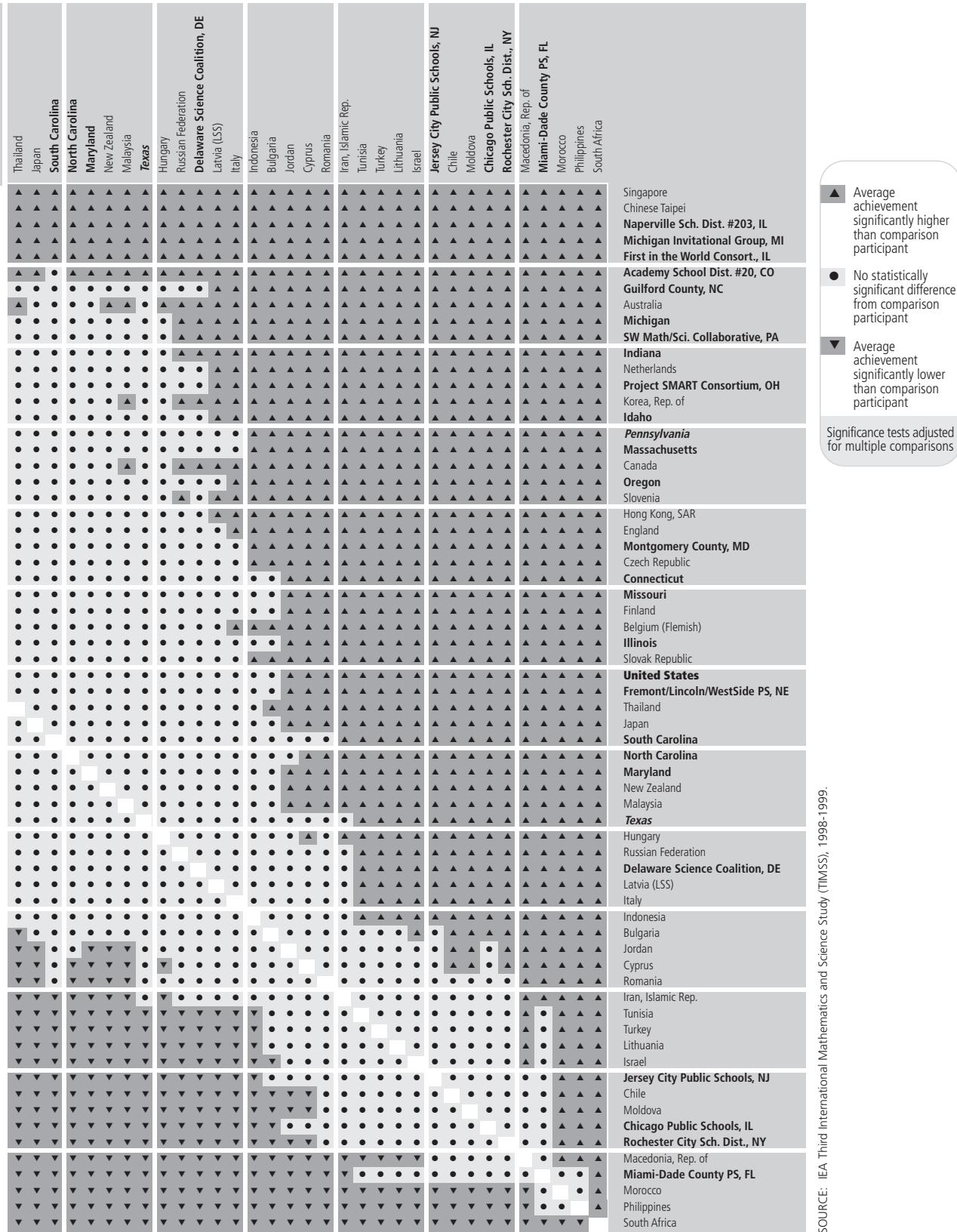
States in *italics* did not fully satisfy guidelines for sample participation rates (see Appendix A for details).



SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.

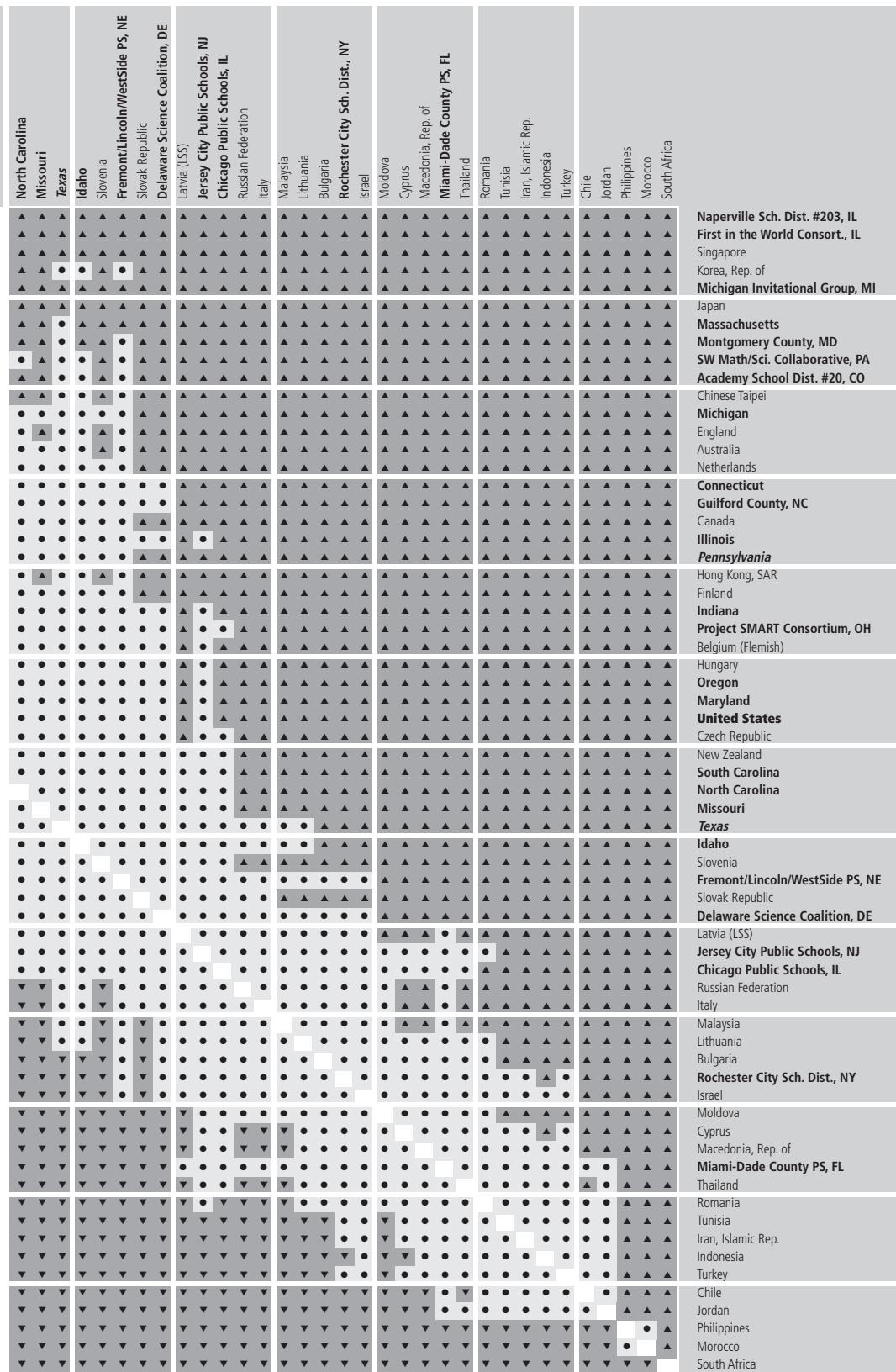




SOURCE: IEA Third International Mathematics and Science Study (TIMSS). 1998-1999.

**Instructions:** Read across the row for a participant to compare performance with the participants listed along the top of the chart. The symbols indicate whether the average achievement of the participant in the row is significantly lower than that of the comparison participant, significantly higher than that of the comparison participant, or if there is no statistically significant difference between the average achievement of the two participants.

States in *italics* did not fully satisfy guidelines for sample participation rates (see Appendix A for details).



SOURCE: IEA Third International Mathematics and Science Study (TIMSS), 1998-1999.

