## Supplemental Tables to NCES 2008-338

These supplemental tables contain additional data supporting the report Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338). While the tables and findings of the main report provide 2003-04 Schools and Staffing Survey data on the qualifications of teachers by subject area(s) taught (main assignment and other assignments), these supplemental tables provides a finer breakdown of teacher qualifications by state, by subject (English, mathematics, science, and social science) and teacher and school characteristics. For more information about the content of these tables, please see the main report (NCES 2008-338).

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Table 1. Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by state: 2003-04

| State | Number | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | of teachers | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| All teachers ${ }^{2}$ | 606,140 | 83.6 | 70.0 | 13.6 | 16.4 | 9.8 | 6.6 | 79.8 |
| Alabama | 9,180 | 84.9 | 75.8 | 9.2 | 15.1 | 8.6 | 6.5 | 84.4 |
| Alaska | 1,780 | 77.9 | 61.5 | 16.4 | 22.1 | 8.0 | 14.0 | 69.6 |
| Arizona | 10,000 | 76.3 | 59.6 | 16.7 | 23.7 | 13.4 | 10.3 | 73.0 |
| Arkansas | 8,620 | 78.2 | 70.5 | 7.7 | 21.8 | 17.6 | 4.2 | 88.1 |
| California | 51,340 | 81.3 | 67.6 | 13.7 | 18.7 | 10.7 | 8.0 | 78.4 |
| Colorado | 9,680 | 84.8 | 73.2 | 11.6 | 15.2 | 8.2 | 7.0 | 81.4 |
| Connecticut | 9,240 | 89.7 | 77.5 | 12.2 | 10.3 | 6.3 | 3.9 | 83.9 |
| Delaware | 1,420 | 81.4 | 61.9 | 19.5 | 18.6 | 11.0 | 7.6 | 72.9 |
| District of Columbia | 700 | 87.0 | 54.7 | 32.3 | 13.0 | 7.8 ! | 5.2 ! | 62.5 |
| Florida | 28,270 | 81.2 | 62.1 | 19.2 | 18.8 | 9.5 | 9.3 | 71.5 |
| Georgia | 16,190 | 85.0 | 75.0 | 10.0 | 15.0 | 9.4 | 5.6 | 84.4 |
| Hawaii | 2,220 | 79.7 | 67.0 | 12.6 | 20.3 | 8.1 | 12.2 | 75.2 |
| Idaho | 3,760 | 80.7 | 71.5 | 9.2 | 19.3 | 14.2 | 5.1 | 85.7 |
| Illinois | 26,050 | 91.6 | 79.4 | 12.3 | 8.4 | 4.5 | 3.9 | 83.9 |
| Indiana | 11,210 | 85.9 | 79.8 | 6.1 | 14.1 | 11.7 | 2.4 | 91.6 |
| Iowa | 6,970 | 87.9 | 79.7 | 8.2 | 12.1 | 8.6 | 3.5 | 88.3 |
| Kansas | 7,640 | 85.2 | 80.8 | 4.4 | 14.8 | 10.5 | 4.3 | 91.3 |
| Kentucky | 8,680 | 87.4 | 73.2 | 14.2 | 12.6 | 6.6 | 6.0 | 79.8 |
| Louisiana | 9,310 | 69.4 | 52.2 | 17.2 | 30.6 | 17.1 | 13.5 | 69.3 |
| Maine | 4,270 | 84.3 | 70.0 | 14.2 | 15.7 | 11.6 | 4.1 | 81.7 |
| Maryland | 10,150 | 85.4 | 66.7 | 18.7 | 14.6 | 6.3 | 8.3 | 73.0 |
| Massachusetts | 17,670 | 86.0 | 67.9 | 18.1 | 14.0 | 6.8 | 7.2 | 74.7 |
| Michigan | 19,050 | 85.2 | 67.3 | 18.0 | 14.8 | 10.3 | 4.5 | 77.5 |
| Minnesota | 12,030 | 89.1 | 79.8 | 9.3 ! | 10.9 | 6.1 | 4.8 | 85.9 |
| Mississippi | 4,990 | 82.1 | 73.8 | 8.3 | 17.9 | 13.1 | 4.8 | 86.9 |

[^0]Table 1. Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by state: 2003-04-Continued

| State | Number | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | of teachers | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| Missouri | 11,940 | 77.4 | 70.7 | 6.6 | 22.6 | 13.7 | 9.0 | 84.4 |
| Montana | 2,950 | 83.5 | 74.1 | 9.4 | 16.5 | 11.1 | 5.4 | 85.2 |
| Nebraska | 5,960 | 88.8 | 81.1 | 7.7 | 11.2 | 5.6 | 5.6 | 86.7 |
| Nevada | 2,740 | 83.4 | 71.4 | 12.0 | 16.6 | 13.7 | 2.9 ! | 85.1 |
| New Hampshire | 3,210 | 87.8 | 74.5 | 13.3 | 12.2 | 6.0 | 6.2 | 80.5 |
| New Jersey | 20,490 | 89.1 | 76.6 | 12.5 | 10.9 | 5.8 | 5.1 | 82.4 |
| New Mexico | 3,870 | 73.4 | 65.1 | 8.3 | 26.6 | 20.2 | 6.3 | 85.4 |
| New York | 44,170 | 86.8 | 64.3 | 22.5 | 13.2 | 4.9 | 8.2 | 69.2 |
| North Carolina | 16,900 | 84.8 | 65.5 | 19.2 | 15.2 | 7.3 | 7.9 | 72.8 |
| North Dakota | 2,170 | 85.8 | 79.1 | 6.7 | 14.2 | 12.4 | 1.9 | 91.4 |
| Ohio | 25,640 | 86.9 | 70.0 | 16.9 | 13.1 | 8.3 | 4.8 | 78.3 |
| Oklahoma | 10,400 | 72.6 | 65.4 | 7.2 | 27.4 | 20.7 | 6.7 | 86.1 |
| Oregon | 5,680 | 84.6 | 69.9 | 14.7 | 15.4 | 9.7 | 5.7 | 79.6 |
| Pennsylvania | 24,300 | 83.1 | 74.6 | 8.6 | 16.9 | 10.5 | 6.4 | 85.1 |
| Rhode Island | 2,330 | 85.8 | 74.3 | 11.5 | 14.2 | 11.0 ! | 3.2 ! | 85.3 |
| South Carolina | 9,630 | 88.7 | 70.9 | 17.8 | 11.3 | 7.6 | 3.7 | 78.5 |
| South Dakota | 3,060 | 77.5 | 65.8 | 11.7 | 22.5 | 17.9 | 4.6 | 83.7 |
| Tennessee | 10,680 | 76.3 | 68.4 | 8.0 | 23.7 | 16.6 | 7.1 | 84.9 |
| Texas | 57,610 | 77.8 | 65.3 | 12.5 | 22.2 | 14.3 | 7.9 | 79.5 |
| Utah | 3,980 | 80.2 | 71.4 | 8.8 | 19.8 | 14.4 | 5.4 | 85.8 |
| Vermont | 2,260 | 87.8 | 73.5 | 14.3 | 12.2 | 9.0 | 3.2 ! | 82.5 |
| Virginia | 15,990 | 85.7 | 71.9 | 13.8 | 14.3 | 8.1 | 6.2 | 80.0 |
| Washington | 11,330 | 80.2 | 60.0 | 20.3 | 19.8 | 10.2 | 9.6 | 70.1 |
| West Virginia | 3,420 | 86.9 | 77.2 | 9.7 | 13.1 | 7.2 | 5.9 | 84.3 |
| Wisconsin | 13,380 | 92.3 | 85.1 | 7.1 | 7.7 | 5.2 | 2.5 | 90.4 |
| Wyoming | 1,620! | 80.4 | 73.7 | 6.7 ! | 19.6 | 12.5 | 7.1 ! | 86.2 |

[^1]${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
${ }^{2}$ "All teachers" includes the subsample of high school-level teachers (defined below) who reported a main assignment in English, mathematics, science, social science, French, German, Latin, Spanish, art/arts or crafts, music, or dance/theater.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Each main assignment includes several subfields. See the appendixes of Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338) for technical notes and definitions of specific subjects within main assignment fields. "Major in main assignment" columns include all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in main assignment are credited if they were earned at the bachelor's degree level or higher. "Certified" columns contain teachers with a regular/probationary certification in-subject and at the secondary level. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

| Selected teacher and school characteristic | Number of teachers | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{\text {' }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified ${ }^{\prime}$ | Not certified | Total | Certified ${ }^{\text {' }}$ | Not certified |  |
| All teachers ${ }^{2}$ | 606,100 | 83.6 | 70.0 | 13.6 | 16.4 | 9.8 | 6.6 | 79.8 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 25,000 | 69.2 | 54.3 | 14.9 | 30.8 | 9.1 | 21.7 | 63.4 |
| 11-18 | 124,000 | 80.2 | 66.0 | 14.2 | 19.8 | 11.1 | 8.7 | 77.1 |
| 19-27 | 304,700 | 84.7 | 71.7 | 13.1 | 15.3 | 10.0 | 5.3 | 81.7 |
| 28 or more students | 152,400 | 86.5 | 72.4 | 14.2 | 13.5 | 8.4 | 5.0 | 80.8 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 100,000 | 80.1 | 49.0 | 31.1 | 19.9 | 7.3 | 12.6 | 56.3 |
| 4-9 | 164,000 | 83.1 | 70.7 | 12.3 | 16.9 | 10.4 | 6.6 | 81.1 |
| 10-19 | 154,100 | 83.6 | 75.0 | 8.6 | 16.4 | 11.1 | 5.3 | 86.1 |
| 20 or more | 188,000 | 86.0 | 76.4 | 9.6 | 14.0 | 9.5 | 4.5 | 85.9 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 7,500 | 67.6 | 34.5 | 33.1 | 32.4 | 4.7 | 27.7 | 39.2 |
| Traditional public school | 598,600 | 83.8 | 70.4 | 13.4 | 16.2 | 9.9 | 6.3 | 80.3 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 163,200 | 82.4 | 67.0 | 15.4 | 17.6 | 9.7 | 7.9 | 76.7 |
| Urban fringe/large town | 313,600 | 85.4 | 71.8 | 13.6 | 14.6 | 8.8 | 5.8 | 80.6 |
| Rural/small town | 129,400 | 80.9 | 69.4 | 11.5 | 19.1 | 12.3 | 6.8 | 81.7 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 11,800 | 68.3 | 48.0 | 20.3 | 31.7 | 9.7 | 21.9 | 57.7 |
| 100-199 | 20,500 | 76.1 | 59.5 | 16.6 | 23.9 | 11.0 | 12.9 | 70.5 |
| 200-499 | 87,200 | 80.9 | 67.9 | 13.0 | 19.1 | 11.1 | 8.0 | 79.0 |
| 500-749 | 70,000 | 83.6 | 70.7 | 12.9 | 16.4 | 10.4 | 6.0 | 81.1 |
| 750-999 | 57,700 | 85.5 | 71.0 | 14.5 | 14.5 | 10.1 | 4.4 | 81.1 |
| 1,000 or more | 358,900 | 84.9 | 71.5 | 13.4 | 15.1 | 9.2 | 5.9 | 80.7 |

See notes at end of table.

| Selected teacher and school characteristic | Number of teachers | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified ${ }^{\text {² }}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{3}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 263,000 | 86.1 | 74.9 | 11.2 | 13.9 | 9.1 | 4.8 | 84.0 |
| 20 to 59.9 | 168,000 | 82.4 | 68.3 | 14.0 | 17.6 | 10.5 | 7.1 | 78.8 |
| 60 or more | 174,600 | 81.1 | 64.2 | 16.9 | 18.9 | 10.2 | 8.8 | 74.3 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 353,400 | 86.1 | 73.5 | 12.7 | 13.9 | 8.9 | 5.0 | 82.4 |
| 35 to 49.9 | 112,300 | 81.1 | 68.4 | 12.7 | 18.9 | 11.0 | 7.9 | 79.4 |
| 50 to 74.9 | 78,400 | 79.0 | 64.8 | 14.2 | 21.0 | 13.3 | 7.7 | 78.0 |
| 75 or more | 41,800 | 79.7 | 57.7 | 22.0 | 20.3 | 8.3 | 12.0 | 66.0 |
| Did not participate in program | 20,200 | 80.1 | 63.8 | 16.3 | 19.9 | 7.9 | 11.9 | 71.7 |

Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
${ }^{2}$ "All teachers" includes the subsample of high school-level teachers (defined below) who reported a main assignment in English, mathematics, science, social science, French, German, Latin, Spanish, art/arts or crafts, music, or dance/theater.
${ }^{3}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Each main assignment includes several subfields. See the appendixes of Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338) for technical notes and definitions of specific subjects within main assignment fields. "Major in main assignment" columns include all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in main assignment are credited if they were earned at the
bachelor's degree level or higher. "Certified" columns contain teachers with a regular/probationary certification in-subject and at the secondary level. Detail may not sum to totals because of rounding SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

| Selected teacher and school characteristic | Number of English teachers | Major in English |  |  | No major in English |  |  | Total certified in English |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | $\begin{gathered} \hline \text { Certified } \\ \text { in English } \\ \hline \end{gathered}$ | Not certified in English | Total | $\begin{array}{r} \hline \text { Certified } \\ \text { in English } \\ \hline \end{array}$ | Not certified in English |  |
| All teachers with an English main assignment ${ }^{1}$ | 134,900 | 84.5 | 71.1 | 13.4 | 15.5 | 9.1 | 6.4 | 80.2 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 5,900 | 65.5 | 45.9 | 19.6 | 34.5 | 12.6 | 21.9 | 58.5 |
| 11-18 | 30,100 | 79.6 | 65.1 | 14.4 | 20.4 | 10.6 | 9.8 | 75.8 |
| 19-27 | 71,700 | 87.1 | 74.4 | 12.7 | 12.9 | 8.5 | 4.4 | 82.8 |
| 28 or more students | 27,200 | 87.2 | 74.5 | 12.7 | 12.8 | 8.2 | 4.6 | 82.7 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 24,800 | 80.3 | 52.6 | 27.8 | 19.7 | 8.2 | 11.5 | 60.7 |
| 4-9 | 35,300 | 84.9 | 74.7 | 10.2 | 15.1 | 9.3 | 5.8 | 84.0 |
| 10-19 | 31,200 | 82.8 | 73.5 | 9.2 | 17.2 | 11.9 | 5.3 | 85.5 |
| 20 or more | 43,600 | 87.8 | 77.0 | 10.8 | 12.2 | 7.4 | 4.9 | 84.3 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 1,500 | 67.9 | 38.8 | 29.1 | 32.1 | 10.2 | 21.9 | 49.0 |
| Traditional public school | 133,300 | 84.7 | 71.5 | 13.2 | 15.3 | 9.1 | 6.3 | 80.5 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 37,700 | 85.7 | 72.2 | 13.5 | 14.3 | 7.9 | 6.4 | 80.1 |
| Urban fringe/large town | 69,200 | 85.3 | 71.5 | 13.8 | 14.7 | 8.5 | 6.1 | 80.1 |
| Rural/small town | 28,000 | 80.8 | 68.6 | 12.2 | 19.2 | 12.0 | 7.2 | 80.5 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 3,200 | 66.0 | 53.3 | 12.8 | 34.0 | 7.4 | 26.5 | 60.7 |
| 100-199 | 4,600 | 79.5 | 61.1 | 18.4 | 20.5 | 9.5 | 11.0 | 70.6 |
| 200-499 | 17,900 | 79.4 | 67.1 | 12.3 | 20.6 | 11.7 | 8.9 | 78.7 |
| 500-749 | 16,200 | 78.4 | 62.1 | 16.3 | 21.6 | 12.4 | 9.2 | 74.5 |
| 750-999 | 12,900 | 84.2 | 71.4 | 12.8 | 15.8 | 9.8 | 6.0 | 81.2 |
| 1,000 or more | 80,100 | 87.9 | 75.0 | 12.9 | 12.1 | 7.8 | 4.3 | 82.8 |

See notes at end of table.

Table 3. Number of public high school-level teachers with a main assignment in English and the percentage with a major and certification in English, by selected teacher and school characteristics: 2003-04-Continued

| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 20 | 57,000 | 85.7 | 74.2 | 11.5 | 14.3 | 9.0 | 5.3 | 83.2 |
| 20 to 59.9 | 36,200 | 85.6 | 70.9 | 14.7 | 14.4 | 9.4 | 5.0 | 80.3 |
| 60 or more | 41,700 | 81.9 | 67.0 | 14.9 | 18.1 | 8.9 | 9.3 | 75.9 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 75,100 | 88.3 | 75.2 | 13.0 | 11.7 | 8.0 | 3.8 | 83.2 |
| 35 to 49.9 | 26,200 | 82.1 | 69.2 | 12.9 | 17.9 | 9.9 | 7.9 | 79.2 |
| 50 to 74.9 | 17,800 | 77.1 | 62.9 | 14.2 | 22.9 | 12.2 | 10.7 | 75.1 |
| 75 or more | 10,200 | 81.6 | 64.7 | 16.9 | 18.4 | 9.9 | 8.5 | 74.6 |
| Did not participate in program | 5,600 | 73.8 | 61.7 | 12.0 | 26.2 | 8.6 | 17.7 | 70.3 |

${ }^{1}$ "All teachers with an English main assignment" includes the subsample of high school-level teachers who reported a main assignment in communications, composition, English, journalism, language arts, reading, or speech.
${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Included in the "Major in English" columns are all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in English are credited if they were
earned at the bachelor's degree level or higher. "Certified in English" columns contain teachers with a regular/probationary certification in-subject and at the secondary level. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Number of public high school-level teachers with a main assignment in mathematics and the percentage with a major and certification in mathematics, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic | Number of mathematics teachers | Major in mathematics |  |  | No major in mathematics |  |  | Total certified in mathematics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified <br> in mathematics | Not certified in mathematics | Total | Certified in mathematics | Not certified in mathematics |  |
| All teachers with a mathematics main assignment ${ }^{1}$ | 128,500 | 76.0 | 64.5 | 11.5 | 24.0 | 12.7 | 11.3 | 77.2 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 7,400 | 66.5 | 58.3 | 8.1 | 33.5 | 9.3 | 24.3 | 67.6 |
| 11-18 | 29,800 | 69.4 | 59.2 | 10.2 | 30.6 | 16.0 | 14.6 | 75.2 |
| 19-27 | 65,600 | 79.0 | 66.6 | 12.4 | 21.0 | 12.9 | 8.1 | 79.4 |
| 28 or more students | 25,800 | 78.8 | 67.3 | 11.5 | 21.2 | 9.4 | 11.8 | 76.7 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 21,300 | 66.1 | 37.8 | 28.2 | 33.9 | 9.9 | 24.0 | 47.7 |
| 4-9 | 34,800 | 74.3 | 63.6 | 10.7 | 25.7 | 14.3 | 11.4 | 77.9 |
| 10-19 | 34,400 | 78.7 | 73.5 | 5.2 | 21.3 | 13.4 | 7.9 | 86.9 |
| 20 or more | 38,100 | 80.7 | 72.1 | 8.6 | 19.3 | 12.2 | 7.1 | 84.3 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 1,900 | 50.0 | 31.3 | 18.7 | 50.0 | 5.8 | 44.2 | 37.1 |
| Traditional public school | 126,700 | 76.4 | 65.0 | 11.4 | 23.6 | 12.8 | 10.8 | 77.8 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 35,100 | 71.1 | 58.2 | 13.0 | 28.9 | 12.1 | 16.7 | 70.3 |
| Urban fringe/large town | 65,900 | 79.7 | 68.0 | 11.7 | 20.3 | 10.9 | 9.4 | 78.9 |
| Rural/small town | 27,500 | 73.5 | 64.2 | 9.2 | 26.5 | 17.6 | 8.9 | 81.9 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 2,400 | 65.3 | 47.0 | 18.3 | 34.7 | 7.2 ! | 27.4 | 54.2 |
| 100-199 | 4,800 | 60.9 | 51.4 | 9.5 | 39.1 | 18.7 | 20.5 | 70.0 |
| 200-499 | 19,500 | 74.4 | 64.5 | 9.9 | 25.6 | 13.0 | 12.6 | 77.5 |
| 500-749 | 14,700 | 75.5 | 67.4 | 8.1 | 24.5 | 14.3 | 10.2 | 81.7 |
| 750-999 | 11,700 | 82.8 | 68.8 | 14.0 | 17.2 | 10.9 | 6.3 | 79.7 |
| 1,000 or more | 75,600 | 76.8 | 64.7 | 12.1 | 23.2 | 12.4 | 10.9 | 77.1 |

See notes at end of table.

Table 4. Number of public high school-level teachers with a main assignment in mathematics and the percentage with a major and certification in mathematics, by selected teacher and school characteristics: 2003-04-Continued

| Selected teacher and school characteristic | Number of mathematics teachers | Major in mathematics |  |  | No major in mathematics |  |  | Total certified in mathematics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in mathematics | Not certified in mathematics | Total | Certified in mathematics | Not certified in mathematics |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 54,100 | 81.7 | 73.2 | 8.6 | 18.3 | 11.0 | 7.3 | 84.1 |
| 20 to 59.9 | 36,200 | 72.2 | 61.1 | 11.2 | 27.8 | 15.8 | 12.0 | 76.8 |
| 60 or more | 38,000 | 71.7 | 55.7 | 16.0 | 28.3 | 12.2 | 16.1 | 67.9 |
| Percent of $\mathrm{K}-12$ students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 74,900 | 80.0 | 69.0 | 11.1 | 20.0 | 11.4 | 8.6 | 80.3 |
| 35 to 49.9 | 24,100 | 71.9 | 62.1 | 9.7 | 28.1 | 14.1 | 14.0 | 76.3 |
| 50 to 74.9 | 17,200 | 70.2 | 59.6 | 10.5 | 29.8 | 19.0 | 10.9 | 78.6 |
| 75 or more | 7,900 | 64.3 | 45.3 | 19.0 | 35.7 | 9.2 | 26.5 | 54.5 |
| Did not participate in program | 4,400 | 74.1 | 55.6 | 18.5 | 25.9 | 8.7 | 17.2 | 64.3 |

[^2]Table 5. Number of public high school-level teachers with a main assignment in science and the percentage with a major and certification in science, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic |  | Major in science |  |  | No major in science |  |  | Total certified in science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of science teachers | Total | Certified in science | Not certified in science | Total | Certified in science | Not certified in science |  |
| All teachers with a science main assignment ${ }^{1}$ | 106,100 | 87.2 | 71.7 | 15.5 | 12.8 | 8.3 | 4.5 | 80.0 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 3,200 | 69.1 | 58.8 | 10.3 | 30.9 | 5.0 ! | 25.8 | 63.9 |
| 11-18 | 20,400 | 87.8 | 71.7 | 16.0 | 12.2 | 6.3 | 6.0 | 78.0 |
| 19-27 | 58,200 | 88.2 | 72.9 | 15.3 | 11.8 | 8.2 | 3.6 | 81.1 |
| 28 or more students | 24,400 | 86.5 | 70.6 | 15.9 | 13.5 | 10.8 | 2.7 | 81.4 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 19,900 | 90.4 | 47.0 | 43.4 | 9.6 | 3.0 | 6.6 | 50.0 |
| 4-9 | 27,100 | 86.6 | 74.4 | 12.2 | 13.4 | 9.2 | 4.2 | 83.6 |
| 10-19 | 29,100 | 85.3 | 78.0 | 7.3 | 14.7 | 9.7 | 5.0 | 87.7 |
| 20 or more | 30,000 | 87.4 | 79.5 | 7.9 | 12.6 | 9.8 | 2.8 | 89.3 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 1,400 | 81.3 | 41.2 | 40.2 | 18.7 | 1.7 ! | 17.0 | 42.8 |
| Traditional public school | 104,700 | 87.3 | 72.1 | 15.1 | 12.7 | 8.4 | 4.3 | 80.5 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 29,200 | 87.6 | 68.6 | 19.0 | 12.4 | 7.3 | 5.1 | 75.9 |
| Urban fringe/large town | 55,800 | 88.7 | 74.0 | 14.7 | 11.3 | 7.4 | 3.8 | 81.4 |
| Rural/small town | 21,000 | 82.4 | 69.9 | 12.5 | 17.6 | 12.1 | 5.5 | 82.0 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 2,300 | 61.1 | 53.3 | 7.8 | 38.9 | 19.8 ! | 19.2 | 73.0 |
| 100-199 | 2,900 | 70.8 | 60.6 | 10.3 | 29.2 | 10.0 | 19.2 | 70.6 |
| 200-499 | 12,900 | 85.4 | 71.0 | 14.4 | 14.6 | 10.8 | 3.8 | 81.8 |
| 500-749 | 12,900 | 90.6 | 74.5 | 16.1 | 9.4 | 6.7 | 2.6 | 81.3 |
| 750-999 | 9,700 | 91.1 | 77.5 | 13.6 | 8.9 | 5.9 | 3.0 ! | 83.4 |
| 1,000 or more | 65,400 | 87.9 | 71.6 | 16.3 | 12.1 | 8.0 | 4.1 | 79.6 |

See notes at end of table.

Table 5. Number of public high school-level teachers with a main assignment in science and the percentage with a major and certification in science, by selected teacher and school characteristics: 2003-04-Continued

| Selected teacher and school characteristic | Number of science teachers | Major in science |  |  | No major in science |  |  | Total certified in science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in science | Not certified in science | Total | Certified in science | Not certified in science |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 45,600 | 89.5 | 77.1 | 12.4 | 10.5 | 7.7 | 2.8 | 84.8 |
| 20 to 59.9 | 30,300 | 86.5 | 69.8 | 16.7 | 13.5 | 7.6 | 5.9 | 77.4 |
| 60 or more | 30,000 | 84.3 | 65.3 | 19.0 | 15.7 | 10.1 | 5.7 | 75.3 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 62,700 | 89.1 | 75.0 | 14.2 | 10.9 | 7.3 | 3.5 | 82.3 |
| 35 to 49.9 | 18,900 | 84.0 | 72.1 | 11.9 | 16.0 | 9.9 | 6.1 | 82.0 |
| 50 to 74.9 | 13,600 | 84.0 | 62.4 | 21.6 | 16.0 | 12.4 | 3.6 | 74.8 |
| 75 or more | 7,500 | 83.4 | 59.1 | 24.4 | 16.6 | 7.6 | 8.9 | 66.7 |
| Did not participate in program | 3,500 | 89.6 | 74.7 | 14.9 | 10.4 | 2.6 ! | 7.8 ! | 77.3 |

! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
"All teachers with a science main assignment" includes the subsample of high school-level teachers who reported a main assignment in science (general), biology/life sciences, chemistry, Earth sciences, integrated science, physical science, or physics.
${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD) In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Included in the "Major in science" columns are all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in science are credited if they were earned at the bachelor's degree level or higher. "Certified in science" columns contain teachers with a regular/probationary certification in science and at the secondary level. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

Table 6. Number of public high school-level teachers with a main assignment in social science and the percentage with a major and certification in social science, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic | Number of social science teachers | Major in social science |  |  | No major in social science |  |  | Total certified in social science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in social science | Not certified in social science | Total | Certified in social science | Not certified in social science |  |
| All teachers with a social science main assignment ${ }^{1}$ | 111,600 | 83.6 | 70.7 | 12.9 | 16.4 | 11.1 | 5.2 | 81.8 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 3,100 | 56.3 | 42.7 | 13.6 | 43.7 | 2.4 ! | 41.2 | 45.1 |
| 11-18 | 15,700 | 77.1 | 60.5 | 16.6 | 22.9 | 16.8 | 6.2 | 77.3 |
| 19-27 | 56,000 | 85.8 | 74.3 | 11.5 | 14.2 | 10.2 | 4.0 | 84.4 |
| 28 or more students | 36,800 | 85.4 | 72.0 | 13.5 | 14.6 | 10.9 | 3.7 | 82.8 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 16,800 | 81.2 | 54.9 | 26.3 | 18.8 | 9.7 | 9.1 | 64.6 |
| 4-9 | 34,000 | 85.5 | 73.8 | 11.7 | 14.5 | 9.7 | 4.9 | 83.4 |
| 10-19 | 23,900 | 81.7 | 72.2 | 9.5 | 18.3 | 15.0 | 3.3 | 87.2 |
| 20 or more | 36,800 | 84.3 | 74.1 | 10.2 | 15.7 | 10.6 | 5.2 | 84.7 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 1,400 | 78.5 | 38.1 | 40.4 | 21.5 | 4.6 ! | 16.9 | 42.7 |
| Traditional public school | 110,200 | 83.7 | 71.1 | 12.6 | 16.3 | 11.2 | 5.1 | 82.3 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 31,200 | 84.1 | 69.2 | 15.0 | 15.9 | 11.2 | 4.6 | 80.4 |
| Urban fringe/large town | 58,000 | 85.3 | 72.3 | 13.0 | 14.7 | 10.2 | 4.5 | 82.5 |
| Rural/small town | 22,400 | 78.5 | 68.6 | 10.0 | 21.5 | 13.3 | 8.1 | 81.9 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 2,500 | 71.2 | 32.2 | 38.9 | 28.8 | 7.2 ! | 21.6 | 39.4 |
| 100-199 | 3,600 | 78.6 | 55.8 | 22.8 | 21.4 | 10.4 | 11.0 | 66.1 |
| 200-499 | 15,800 | 79.8 | 67.5 | 12.3 | 20.2 | 13.5 | 6.7 | 81.0 |
| 500-749 | 11,100 | 83.8 | 74.4 | 9.3 | 16.2 | 11.8 | 4.4 | 86.2 |
| 750-999 | 10,300 | 84.6 | 68.2 | 16.4 | 15.4 | 13.1 | 2.3 | 81.3 |
| 1,000 or more | 68,300 | 85.1 | 73.4 | 11.6 | 14.9 | 10.4 | 4.6 | 83.8 |

Table 6. Number of public high school-level teachers with a main assignment in social science and the percentage with a major and certification in social science, by selected teacher and school characteristics: 2003-04-Continued

| Selected teacher and school characteristic | Number of social science teachers | Major in social science |  |  | No major in social science |  |  | Total certified in social science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in social science | Not certified in social science | Total | Certified in social science | Not certified in social science |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 46,000 | 84.2 | 75.5 | 8.7 | 15.8 | 11.3 | 4.4 | 86.8 |
| 20 to 59.9 | 31,100 | 80.3 | 66.2 | 14.1 | 19.7 | 12.5 | 7.2 | 78.7 |
| 60 or more | 34,300 | 85.9 | 68.3 | 17.6 | 14.1 | 9.6 | 4.5 | 77.9 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 64,900 | 85.2 | 74.2 | 11.0 | 14.8 | 10.4 | 4.4 | 84.6 |
| 35 to 49.9 | 20,600 | 82.2 | 71.7 | 10.5 | 17.8 | 12.5 | 5.2 | 84.3 |
| 50 to 74.9 | 14,500 | 81.4 | 66.2 | 15.2 | 18.6 | 14.1 | 4.4 | 80.4 |
| 75 or more | 8,000 | 78.0 | 52.0 | 26.0 | 22.0 | 7.9 | 14.0 | 59.9 |
| Did not participate in program | 3,500 | 83.8 | 60.4 | 23.4 | 16.2 | 11.2 | 5.0 | 71.6 |

! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
${ }^{1}$ "All teachers with a social science main assignment" includes the subsample of high school-level teachers who reported a main assignment in social studies (general), anthropology, economics, geography, government/civics, history, Native American studies, psychology, or sociology.
${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Included in the "Major in social science" columns are all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in social science are credited if they were earned at the bachelor's degree level or higher. "Certified in social science" columns contain teachers with a regular/probationary certification in social science and at the secondary level. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table 7. Number of public high school-level teachers who reported a particular main assignment and the percentage with a major in their main assignment awarded by a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

| Selected main assignment | Number of teachers | Major in main assignment awarded by <br> a department, college, or school of education |  |  | No major in main assignment awarded by a department, college, or school of education |  |  | Total certified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified | Not certified | Total | Certified | Not certified |  |
| English | 134,900 | 58.8 | 50.8 | 8.0 | 41.2 | 29.3 | 11.8 | 80.2 |
| Mathematics | 128,500 | 55.0 | 48.1 | 6.8 | 45.0 | 29.1 | 16.0 | 77.2 |
| Science | 106,100 | 50.2 | 44.0 | 6.2 | 49.8 | 36.1 | 13.7 | 80.0 |
| Biology/life sciences | 42,600 | 47.8 | 37.8 | 10.1 | 52.2 | 31.2 | 20.9 | 69.0 |
| Physical science | 57,400 | 29.5 | 22.4 | 7.2 | 70.5 | 37.7 | 32.7 | 60.1 |
| Chemistry | 21,700 | 26.1 | 18.4 | 7.8 | 73.9 | 43.5 | 30.4 | 61.9 |
| Earth sciences | 10,900 | 26.7 | 21.5 | 5.2 | 73.3 | 30.1 | 43.2 | 51.6 |
| Physics | 9,200 | 32.2 | 25.6 | 6.6 | 67.8 | 35.4 | 32.4 | 61.0 |
| Social science | 111,600 | 56.9 | 48.2 | 8.7 | 43.1 | 33.7 | 9.4 | 81.8 |
| Economics | 5,200 | 10.0 | 3.3 ! | 6.7 | 90.0 | 14.1 | 75.9 | 17.4 |
| Geography | 8,400 | 8.3 | 2.0 ! | 6.3 | 91.7 | 16.1 | 75.6 | 18.1 |
| Government/civics | 14,700 | 5.1 | 2.7 | 2.4 | 94.9 | 17.6 | 77.3 | 20.3 |
| History | 57,200 | 47.0 | 21.1 | 25.9 | 53.0 | 15.6 | 37.4 | 36.7 |
| French | 9,800 | 57.9 | 49.0 | 8.9 | 42.1 | 33.5 | 8.6 | 82.5 |
| German | 3,400 | 47.9 | 38.4 | 9.4 | 52.1 | 42.2 | 9.9 | 80.6 |
| Latin | 2,000 | 43.3 | 39.1 | 4.2 ! | 56.7 | 32.3 | 24.4 | 71.4 |
| Spanish | 37,000 | 57.2 | 46.1 | 11.1 | 42.8 | 29.6 | 13.2 | 75.7 |
| Art/Arts or crafts ${ }^{1}$ | 29,700 | 79.1 | 69.1 | 10.0 | 20.9 | 14.5 | 6.4 | 83.6 |
| Music ${ }^{1}$ | 36,300 | 84.6 | 71.3 | 13.3 | 15.4 | 11.0 | 4.4 | 82.3 |
| Dance/theater ${ }^{1}$ | 6,800 | 39.9 | 34.1 | 5.8 | 60.1 | 38.0 | 22.1 | 72.1 |

! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Under science and social science, several subfields are examined in detail. These subfields are not inclusive of all subfields in the subject and, therefore, do not add to the broad field total. See the appendixes of Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338) for technical notes and specific definitions of subjects within main assignment fields and major/certification areas. "Major in main assignment awarded by a department, college, or school of education" columns include only teachers who earned their major within the school/college of education. Majors in main assignment are credited if they were earned at the bachelor's degree level or higher. "No major in main assignment awarded by a department, college, or school of education" columns include an in-subject major earned outside the college/school of education or an out-of-subject major. "Certified" columns contain teachers with a regular/probationary certification in-subject and at the secondary level. In cases where a teacher earned two majors under the first bachelor's degree, the department that awarded the first bachelor's degree (T0118) was used to assign where the first (T0119) and second (T0121) majors were earned. All teachers who earned an educational specialist/professional diploma or Certificate of Advanced Graduate Studies were flagged as having received the degree from the school/college of education. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

Table 8. Number of public high school-level teachers who reported a particular main assignment and the percentage with a major in their main assignment awarded outside a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

| Selected main assignment | Number of teachers | Major in main assignment awarded outside a department, college, or school of education |  |  | No major in main assignment awarded outside a department, college, or school of education |  |  | Total certified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified | Not certified | Total | Certified | Not certified |  |
| English | 134,900 | 30.3 | 24.6 | 5.7 | 69.7 | 55.6 | 14.2 | 80.2 |
| Mathematics | 128,500 | 24.6 | 19.8 | 4.8 | 75.4 | 57.4 | 18.0 | 77.2 |
| Science | 106,100 | 41.0 | 31.4 | 9.6 | 59.0 | 48.6 | 10.3 | 80.0 |
| Biology/life sciences | 42,600 | 35.8 | 23.6 | 12.2 | 64.2 | 45.4 | 18.8 | 69.0 |
| Physical science | 57,400 | 26.8 | 17.7 | 9.2 | 73.2 | 42.5 | 30.7 | 60.1 |
| Chemistry | 21,700 | 25.9 | 16.9 | 9.0 | 74.1 | 45.0 | 29.1 | 61.9 |
| Earth sciences | 10,900 | 13.5 | 11.2 | 2.2 ! | 86.5 | 40.4 | 46.1 | 51.6 |
| Physics | 9,200 | 25.0 | 13.7 | 11.3 | 75.0 | 47.3 | 27.7 | 61.0 |
| Social science | 111,600 | 29.5 | 24.6 | 4.9 | 70.5 | 57.2 | 13.3 | 81.8 |
| Economics | 5,200 | 11.8 | 6.4 | 5.4 | 88.2 | 11.0 | 77.2 | 17.4 |
| Geography | 8,400 | 1.7 ! | 1.0 ! | 0.7 ! | 98.3 | 17.1 | 81.2 | 18.1 |
| Government/civics | 14,700 | 4.8 | 1.9 ! | 2.9 | 95.2 | 18.4 | 76.8 | 20.3 |
| History | 57,200 | 21.7 | 9.9 | 11.8 | 78.3 | 26.8 | 51.5 | 36.7 |
| French | 9,800 | 37.8 | 30.7 | 7.1 | 62.2 | 51.8 | 10.4 | 82.5 |
| German | 3,400 | 44.7 | 36.6 | 8.1 | 55.3 | 44.1 | 11.3 | 80.6 |
| Latin | 2,000 | 35.1 | 28.5 | 6.6 ! | 64.9 | 42.9 | 22.0 | 71.4 |
| Spanish | 37,000 | 23.8 | 18.3 | 5.5 | 76.2 | 57.5 | 18.7 | 75.7 |
| Art/Arts or crafts ${ }^{1}$ | 29,700 | 20.3 | 15.8 | 4.5 | 79.7 | 67.8 | 11.9 | 83.6 |
| Music ${ }^{1}$ | 36,300 | 17.7 | 14.3 | 3.4 | 82.3 | 68.0 | 14.3 | 82.3 |
| Dance/theater ${ }^{1}$ | 6,800 | 26.0 | 21.2 | 4.8 | 74.0 | 51.0 | 23.1 | 72.1 |

! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Under science and social science, several subfields are examined in detail. These subfields are not inclusive of all subfields in the subject and, therefore, do not add to the broad field total. See the appendixes of Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338) for technical notes and specific definitions of subjects within main assignment fields and major/certification areas. "Major in main assignment awarded outside a department, college, or school of education" columns include only teachers who earned their major outside the school/college of education. Majors in main assignment are credited if they were earned at the bachelor's degree level or higher. "No major in main assignment awarded outside a department, college, or school of education" columns include an in-subject major earned within the college/school of education or an out-of-subject major. "Certified" columns contain teachers with a regular/probationary certification in-subject and at the secondary level. In cases where a teacher earned two majors under the first bachelor's degree, the department that awarded the first bachelor's degree (T0118) was used to assign where the first (T0119) and second (T0121) majors were earned. All teachers who earned an educational specialist/professional diploma or Certificate of Advanced Graduate Studies were flagged as having received the degree from the school/college of education. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

Table 9. Number of public high school-level teachers who reported a particular main assignment and the percentage with majors in
main assignment awarded both within and outside a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

| Selected main assignment | Number of teachers | Majors in main assignment awarded both within and outside a department, college, or school of education |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified | Not certified |
| English | 134,900 | 4.6 | 4.3 | 0.3 |
| Mathematics | 128,500 | 3.6 | 3.4 | 0.1 ! |
| Science | 106,100 | 4.1 | 3.7 | 0.4 |
| Biology/life sciences | 42,600 | 2.5 | 2.3 | 0.2 ! |
| Physical science | 57,400 | 2.0 | 2.0 | 0.1 ! |
| Chemistry | 21,700 | 2.1 | 2.0 | 0.1 ! |
| Earth sciences | 10,900 | 0.4 ! | 0.2 ! | 0.2 ! |
| Physics | 9,200 | \# | \# | \# |
| Social science | 111,600 | 2.8 | 2.1 | 0.7 |
| Economics | 5,200 | \# | \# | \# |
| Geography | 8,400 | \# | \# | \# |
| Government/civics | 14,700 | 0.1 ! | \# | 0.1 ! |
| History | 57,200 | 1.3 | 0.8 | 0.5 |
| French | 9,800 | 6.2 | 5.2 | 1.0 ! |
| German | 3,400 | 2.0 ! | 2.0 ! | \# |
| Latin | 2,000 | 9.1 ! | 9.1 ! | \# |
| Spanish | 37,000 | 1.8 | 1.5 | 0.3 ! |
| Art/Arts or crafts ${ }^{1}$ | 29,700 | 7.8 | 6.9 | 0.9 |
| Music ${ }^{1}$ | 36,300 | 5.2 | 4.9 | 0.2 ! |
| Dance/theater ${ }^{1}$ | 6,800 | 2.4 | 1.8 ! | 0.6 ! |

\# Rounds to zero.
! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Under science and social science, several subfields are examined in detail. These subfields are not inclusive of all subfields in the subject and, therefore, do not add to the broad field total. See the appendixes of Education and Certification Qualifications of Departmentalized Public High School-Level Teachers of Core Subjects: Evidence from the 2003-04 Schools and Staffing Survey (NCES 2008-338) for technical notes and specific definitions of subjects within main assignment fields and major/ certification areas. "Majors in main assignment awarded both within and outside a department, college, or school of education" columns include only teachers who have a double major in their main assignment: one earned within the school/college of education and another earned outside the school/college of education. "Certified" columns include teachers with a regular/probationary certification in-subject and at the secondary level. In cases where a teacher earned two majors under the first bachelor's degree, the department that awarded the first bachelor's degree (T0118) was used to assign where the first (T0119) and second (T0121) majors were earned. All teachers who earned an educational specialist/professional diploma or Certificate of Advanced Graduate Studies were flagged as having received the degree from the school/college of education. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table A-1. Standard errors for: Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by state: 2003-04

|  | State | Number | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | of teachers | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
|  | All teachers ${ }^{2}$ | 14,554.0 | 0.52 | 0.70 | 0.45 | 0.52 | 0.37 | 0.40 | 0.64 |
|  | Alabama | 835.7 | 2.60 | 3.10 | 2.49 | 2.60 | 1.83 | 2.00 | 2.92 |
|  | Alaska | 149.1 | 2.71 | 3.54 | 2.66 | 2.71 | 1.98 | 1.99 | 3.40 |
|  | Arizona | 954.8 | 2.43 | 3.09 | 2.21 | 2.43 | 2.09 | 1.50 | 2.53 |
|  | Arkansas | 857.2 | 3.47 | 4.32 | 2.86 | 3.47 | 3.16 | 1.55 | 3.29 |
|  | California | 10,481.9 | 2.90 | 2.57 | 2.16 | 2.90 | 2.53 | 1.90 | 2.51 |
|  | Colorado | 839.8 | 1.79 | 2.15 | 1.71 | 1.79 | 1.52 | 1.20 | 2.07 |
|  | Connecticut | 793.6 | 2.05 | 2.81 | 2.13 | 2.05 | 1.66 | 1.20 | 2.34 |
|  | Delaware | 286.0 | 4.57 | 7.02 | 5.45 | 4.57 | 3.57 | 3.07 | 5.91 |
|  | District of Columbia | 142.5 | 4.71 | 7.70 | 6.83 | 4.71 | 4.62 | 3.40 | 8.40 |
|  | Florida | 2,721.2 | 1.76 | 2.68 | 2.02 | 1.76 | 1.53 | 1.53 | 2.63 |
|  | Georgia | 1,139.1 | 2.08 | 2.75 | 2.23 | 2.08 | 1.70 | 1.33 | 2.69 |
|  | Hawaii | 413.9 | 5.15 | 5.70 | 3.58 | 5.15 | 3.59 | 5.04 | 5.86 |
|  | Idaho | 361.1 | 3.02 | 3.18 | 1.87 | 3.02 | 2.58 | 1.10 | 2.22 |
|  | Illinois | 3,009.0 | 1.50 | 2.37 | 2.13 | 1.50 | 1.22 | 1.06 | 2.40 |
|  | Indiana | 1,286.5 | 1.43 | 2.22 | 1.57 | 1.43 | 1.43 | 0.77 | 1.72 |
| ふ | lowa | 610.0 | 2.52 | 3.67 | 2.05 | 2.52 | 1.84 | 1.56 | 2.80 |
|  | Kansas | 754.3 | 3.12 | 3.76 | 1.76 | 3.12 | 2.65 | 1.39 | 2.53 |
|  | Kentucky | 1,008.3 | 2.72 | 3.84 | 2.62 | 2.72 | 2.02 | 1.80 | 3.24 |
|  | Louisiana | 853.2 | 2.76 | 3.63 | 3.12 | 2.76 | 2.52 | 2.19 | 3.71 |
|  | Maine | 543.2 | 2.87 | 3.35 | 2.63 | 2.87 | 2.63 | 1.25 | 2.89 |
|  | Maryland | 1,429.7 | 2.01 | 3.61 | 2.99 | 2.01 | 1.69 | 2.10 | 3.77 |
|  | Massachusetts | 1,554.7 | 2.02 | 2.94 | 2.25 | 2.02 | 1.22 | 1.71 | 2.84 |
|  | Michigan | 1,791.2 | 1.90 | 3.03 | 2.29 | 1.90 | 1.64 | 1.11 | 2.53 |
|  | Minnesota | 1,419.6 | 2.33 | 4.90 | 4.95 | 2.33 | 1.51 | 1.43 | 4.89 |
|  | Mississippi | 587.9 | 2.85 | 3.22 | 2.13 | 2.85 | 2.76 | 1.30 | 2.50 |

See notes at end of table.

Table A-1. Standard errors for: Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by state: 2003-04-Continued

| State | Number of teachers | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| Missouri | 1,297.5 | 3.35 | 3.58 | 2.48 | 3.35 | 2.31 | 2.44 | 2.99 |
| Montana | 415.8 | 2.48 | 3.36 | 2.35 | 2.48 | 2.23 | 1.48 | 2.73 |
| Nebraska | 352.6 | 2.31 | 2.60 | 2.13 | 2.31 | 1.70 | 1.64 | 2.43 |
| Nevada | 509.2 | 3.66 | 4.19 | 2.57 | 3.66 | 3.36 | 1.47 | 3.01 |
| New Hampshire | 320.5 | 2.79 | 3.76 | 2.91 | 2.79 | 1.87 | 2.32 | 3.49 |
| New Jersey | 2,134.8 | 1.93 | 2.20 | 2.09 | 1.93 | 1.37 | 1.32 | 2.06 |
| New Mexico | 442.1 | 3.24 | 3.01 | 1.85 | 3.24 | 3.04 | 1.59 | 2.11 |
| New York | 4,096.0 | 2.21 | 3.03 | 2.80 | 2.21 | 1.57 | 2.03 | 3.18 |
| North Carolina | 1,126.0 | 1.58 | 3.16 | 2.82 | 1.58 | 1.20 | 1.47 | 3.20 |
| North Dakota | 177.4 | 2.62 | 3.17 | 1.67 | 2.62 | 2.55 | 0.89 | 2.07 |
| Ohio | 2,307.1 | 2.06 | 2.55 | 2.21 | 2.06 | 1.39 | 1.25 | 2.32 |
| Oklahoma | 759.6 | 2.53 | 3.04 | 1.49 | 2.53 | 1.96 | 1.56 | 2.37 |
| Oregon | 662.7 | 2.60 | 3.52 | 2.42 | 2.60 | 2.40 | 1.98 | 3.18 |
| Pennsylvania | 1,967.2 | 2.10 | 2.52 | 1.24 | 2.10 | 1.95 | 1.53 | 1.80 |
| Rhode Island | 377.8 | 6.99 | 8.11 | 4.06 | 6.99 | 5.82 | 2.82 | 4.99 |
| South Carolina | 923.4 | 2.01 | 2.53 | 2.42 | 2.01 | 1.78 | 1.11 | 2.30 |
| South Dakota | 194.9 | 2.90 | 3.78 | 1.98 | 2.90 | 2.47 | 1.18 | 2.38 |
| Tennessee | 883.9 | 1.95 | 2.27 | 1.41 | 1.95 | 2.10 | 1.23 | 1.79 |
| Texas | 4,171.7 | 1.72 | 1.96 | 1.43 | 1.72 | 1.71 | 0.97 | 1.67 |
| Utah | 496.3 | 3.23 | 3.76 | 2.41 | 3.23 | 3.06 | 2.02 | 3.77 |
| Vermont | 257.8 | 3.38 | 4.45 | 3.81 | 3.38 | 2.46 | 1.73 | 3.74 |
| Virginia | 2,587.4 | 3.58 | 5.47 | 4.29 | 3.58 | 2.69 | 1.76 | 4.56 |
| Washington | 2,210.1 | 2.52 | 3.74 | 2.82 | 2.52 | 2.05 | 1.89 | 3.16 |
| West Virginia | 345.7 | 2.04 | 3.39 | 2.77 | 2.04 | 1.54 | 1.91 | 3.38 |
| Wisconsin | 1,461.1 | 1.66 | 2.24 | 1.87 | 1.66 | 1.67 | 0.90 | 2.11 |
| Wyoming | 845.3 | 7.99 | 7.18 | 3.43 | 7.99 | 5.79 | 5.16 | 5.26 |

${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
${ }^{2}$ "All teachers" includes the subsample of high school-level teachers who reported a main assignment in English, mathematics, science, social science, French, German, Latin, Spanish, art/arts or crafts, music, or dance/theater.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table A-2. Standard errors for: Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by selected teacher and school characteristics:

| Selected teacher and school characteristic | Number of teachers | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| All teachers ${ }^{2}$ | 14,554.0 | 0.52 | 0.70 | 0.45 | 0.52 | 0.37 | 0.40 | 0.64 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 1,794.7 | 3.17 | 3.19 | 2.64 | 3.17 | 1.61 | 3.14 | 3.34 |
| 11-18 | 3,895.8 | 1.01 | 1.29 | 1.10 | 1.01 | 0.81 | 0.63 | 1.21 |
| 19-27 | 8,260.2 | 0.69 | 0.92 | 0.54 | 0.69 | 0.55 | 0.36 | 0.69 |
| 28 or more students | 8,007.3 | 0.91 | 1.17 | 0.94 | 0.91 | 0.78 | 0.60 | 1.14 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 3,383.0 | 1.30 | 2.18 | 1.48 | 1.30 | 0.66 | 0.99 | 1.97 |
| 4-9 | 5,193.6 | 0.87 | 1.01 | 0.80 | 0.87 | 0.71 | 0.60 | 0.92 |
| 10-19 | 5,575.6 | 0.88 | 1.11 | 0.72 | 0.88 | 0.72 | 0.53 | 0.91 |
| 20 or more | 5,696.9 | 0.69 | 0.91 | 0.66 | 0.69 | 0.61 | 0.46 | 0.78 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 784.1 | 2.61 | 3.62 | 3.76 | 2.61 | 1.26 | 2.62 | 3.61 |
| Traditional public school | 14,685.4 | 0.52 | 0.72 | 0.46 | 0.52 | 0.37 | 0.39 | 0.65 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 8,883.8 | 0.95 | 1.20 | 1.08 | 0.95 | 0.84 | 0.64 | 1.01 |
| Urban fringe/large town | 11,094.7 | 0.72 | 1.08 | 0.73 | 0.72 | 0.52 | 0.50 | 0.97 |
| Rural/small town | 3,891.1 | 0.79 | 1.06 | 0.87 | 0.79 | 0.67 | 0.53 | 1.02 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 1,158.1 | 4.36 | 4.81 | 5.04 | 4.36 | 3.05 | 3.27 | 4.60 |
| 100-199 | 1,527.8 | 2.33 | 2.81 | 2.51 | 2.33 | 1.79 | 1.76 | 2.75 |
| 200-499 | 4,473.2 | 1.07 | 1.53 | 1.38 | 1.07 | 0.87 | 0.68 | 1.55 |
| 500-749 | 4,400.5 | 1.28 | 1.36 | 1.40 | 1.28 | 1.01 | 0.77 | 1.43 |
| 750-999 | 3,817.7 | 1.40 | 1.98 | 1.45 | 1.40 | 1.02 | 0.77 | 1.71 |
| 1,000 or more | 13,028.6 | 0.68 | 0.82 | 0.53 | 0.68 | 0.52 | 0.47 | 0.67 |

[^3]Table A-2. Standard errors for: Number of public high school-level teachers and the percentage with a major and certification in their main assignment, by selected teacher and school characteristics: 2003-04-Continued

| Selected teacher and school characteristic | Number of teachers | Major in main assignment |  |  | No major in main assignment |  |  | Total certified ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified ${ }^{1}$ | Not certified | Total | Certified ${ }^{1}$ | Not certified |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{3}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 8,219.4 | 0.62 | 0.89 | 0.67 | 0.62 | 0.49 | 0.35 | 0.78 |
| 20 to 59.9 | 6,609.4 | 0.81 | 1.24 | 0.93 | 0.81 | 0.71 | 0.66 | 1.31 |
| 60 or more | 9,348.7 | 1.08 | 1.16 | 1.04 | 1.08 | 0.79 | 0.76 | 1.04 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 11,844.0 | 0.58 | 0.98 | 0.70 | 0.58 | 0.42 | 0.40 | 0.91 |
| 35 to 49.9 | 6,936.5 | 1.12 | 1.62 | 1.01 | 1.12 | 0.86 | 0.82 | 1.34 |
| 50 to 74.9 | 6,153.7 | 1.41 | 1.53 | 1.51 | 1.41 | 1.22 | 0.92 | 1.61 |
| 75 or more | 3,527.7 | 2.16 | 2.61 | 2.46 | 2.16 | 1.16 | 1.63 | 2.50 |
| Did not participate in program | 2,320.8 | 2.26 | 3.24 | 2.62 | 2.26 | 1.48 | 1.62 | 2.96 |

${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
${ }^{2}$ "All teachers" includes the subsample of high school-level teachers (defined below) who reported a main assignment in English, mathematics, science, social science, French, German, Latin, Spanish, art/arts or crafts, music, or dance/theater.
${ }^{3}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table A-3. Standard errors for: Number of public high school-level teachers with a main assignment in English and the percentage with a major and certification in English, by selected teacher and

| Selected teacher and school characteristic | Number of English teachers | Major in English |  |  | No major in English |  |  | Total certified in English |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in English | Not certified in English | Total | Certified in English | Not certified in English |  |
| All teachers with an English main assignment ${ }^{1}$ | 4,830.4 | 0.86 | 1.12 | 0.86 | 0.86 | 0.64 | 0.59 | 1.06 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 694.7 | 5.39 | 5.83 | 6.01 | 5.39 | 4.36 | 4.37 | 6.18 |
| 11-18 | 1,658.5 | 2.26 | 2.77 | 2.10 | 2.26 | 1.59 | 1.56 | 2.56 |
| 19-27 | 3,214.4 | 1.26 | 1.59 | 1.19 | 1.26 | 0.93 | 0.72 | 1.32 |
| 28 or more students | 2,369.6 | 1.85 | 2.16 | 1.73 | 1.85 | 1.44 | 1.05 | 1.84 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 1,965.8 | 2.55 | 3.73 | 2.74 | 2.55 | 1.66 | 2.03 | 3.37 |
| 4-9 | 2,217.2 | 1.55 | 1.98 | 1.52 | 1.55 | 1.40 | 0.93 | 1.74 |
| 10-19 | 1,669.5 | 1.90 | 2.02 | 1.59 | 1.90 | 1.63 | 0.89 | 1.70 |
| 20 or more | 1,724.7 | 1.22 | 1.87 | 1.58 | 1.22 | 0.93 | 0.95 | 1.72 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 244.3 | 6.19 | 7.45 | 6.95 | 6.19 | 3.86 | 4.81 | 7.58 |
| Traditional public school | 4,804.7 | 0.88 | 1.14 | 0.87 | 0.88 | 0.65 | 0.60 | 1.06 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 2,567.9 | 1.72 | 2.20 | 2.11 | 1.72 | 1.37 | 1.01 | 1.86 |
| Urban fringe/large town | 3,979.1 | 1.15 | 1.62 | 1.29 | 1.15 | 0.92 | 0.87 | 1.66 |
| Rural/small town | 1,339.5 | 1.82 | 2.63 | 1.67 | 1.82 | 1.54 | 1.19 | 2.12 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 440.9 | 6.46 | 5.83 | 3.63 | 6.46 | 2.65 | 5.82 | 5.62 |
| 100-199 | 541.8 | 3.70 | 4.60 | 4.84 | 3.70 | 2.88 | 2.76 | 4.68 |
| 200-499 | 1,186.5 | 2.53 | 3.10 | 2.14 | 2.53 | 2.18 | 1.82 | 2.79 |
| 500-749 | 1,301.7 | 2.95 | 3.19 | 3.09 | 2.95 | 2.04 | 2.20 | 3.43 |
| 750-999 | 1,241.4 | 3.22 | 3.76 | 2.67 | 3.22 | 1.96 | 1.90 | 2.99 |
| 1,000 or more | 4,232.3 | 1.01 | 1.42 | 1.14 | 1.01 | 0.79 | 0.66 | 1.26 |

Table A-3. Standard errors for: Number of public high school-level teachers with a main assignment in English and the percentage with a major and certification in English, by selected teacher and school characteristics: 2003-04-Continued

| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 20 | 2,441.4 | 1.13 | 1.57 | 1.35 | 1.13 | 0.97 | 0.80 | 1.45 |
| 20 to 59.9 | 2,223.4 | 1.66 | 2.23 | 1.62 | 1.66 | 1.47 | 0.98 | 2.02 |
| 60 or more | 2,967.9 | 1.93 | 2.09 | 1.97 | 1.93 | 1.34 | 1.37 | 1.87 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 3,470.2 | 0.95 | 1.42 | 1.20 | 0.95 | 0.81 | 0.63 | 1.39 |
| 35 to 49.9 | 2,141.1 | 2.25 | 2.85 | 2.15 | 2.25 | 1.56 | 1.50 | 2.55 |
| 50 to 74.9 | 1,634.9 | 2.95 | 2.97 | 1.95 | 2.95 | 2.43 | 2.56 | 2.78 |
| 75 or more | 1,027.7 | 3.10 | 3.90 | 3.87 | 3.10 | 2.20 | 2.37 | 3.79 |
| Did not participate in program | 702.4 | 4.46 | 5.70 | 4.59 | 4.46 | 2.51 | 3.88 | 5.44 |

${ }^{1}$ "All teachers with an English main assignment" includes the subsample of high school-level teachers who reported a main assignment in communications, composition, English, journalism, language arts, reading, or speech.
${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD) In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

Table A-4. Standard errors for: Number of public high school-level teachers with a main assignment in mathematics and the percentage with a major and certification in mathematics, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic | Number of mathematics teachers | Major in mathematics |  |  | No major in mathematics |  |  | Total certified in mathematics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in mathematics | Not certified in mathematics | Total | Certified in mathematics | Not certified in mathematics |  |
| All teachers with a mathematics main assignment ${ }^{1}$ | 3,592.9 | 1.22 | 1.44 | 0.89 | 1.22 | 0.87 | 0.85 | 1.27 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 847.2 | 4.92 | 5.16 | 2.68 | 4.92 | 2.74 | 4.71 | 5.08 |
| 11-18 | 1,590.2 | 2.35 | 2.68 | 1.68 | 2.35 | 1.98 | 1.83 | 2.52 |
| 19-27 | 2,368.3 | 1.51 | 1.77 | 1.16 | 1.51 | 1.33 | 0.90 | 1.36 |
| 28 or more students | 1,896.4 | 2.99 | 3.25 | 1.80 | 2.99 | 1.90 | 2.35 | 3.15 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 1,900.5 | 3.11 | 3.81 | 3.41 | 3.11 | 1.74 | 2.74 | 3.71 |
| 4-9 | 1,747.8 | 2.68 | 2.75 | 1.55 | 2.68 | 2.06 | 1.75 | 2.18 |
| 10-19 | 1,882.2 | 2.05 | 2.22 | 1.04 | 2.05 | 1.68 | 1.29 | 1.79 |
| 20 or more | 1,730.0 | 2.02 | 2.19 | 1.18 | 2.02 | 1.64 | 1.11 | 1.60 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 218.2 | 6.25 | 7.07 | 6.76 | 6.25 | 2.85 | 5.94 | 7.04 |
| Traditional public school | 3,617.3 | 1.23 | 1.48 | 0.92 | 1.23 | 0.88 | 0.85 | 1.30 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 2,390.8 | 2.78 | 2.66 | 1.66 | 2.78 | 2.17 | 1.86 | 2.20 |
| Urban fringe/large town | 2,329.6 | 1.96 | 2.28 | 1.33 | 1.96 | 1.21 | 1.21 | 1.76 |
| Rural/small town | 1,273.2 | 2.31 | 2.22 | 1.21 | 2.31 | 2.08 | 1.12 | 1.57 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 313.6 | 7.46 | 7.55 | 7.42 | 7.46 | 3.70 | 6.55 | 7.34 |
| 100-199 | 489.8 | 5.77 | 5.56 | 2.95 | 5.77 | 5.28 | 5.12 | 5.17 |
| 200-499 | 1,285.8 | 2.72 | 3.07 | 1.81 | 2.72 | 2.13 | 1.93 | 2.66 |
| 500-749 | 1,119.7 | 2.95 | 2.73 | 1.74 | 2.95 | 2.50 | 2.22 | 2.69 |
| 750-999 | 1,030.7 | 2.50 | 3.66 | 3.72 | 2.50 | 2.12 | 1.34 | 3.87 |
| 1,000 or more | 3,068.4 | 1.70 | 2.06 | 1.13 | 1.70 | 1.32 | 1.12 | 1.70 |

See notes at end of table.

Table A-4. Standard errors for: Number of public high school-level teachers with a main assignment in mathematics and the percentage with a major and certification in mathematics, by selected teacher and school characteristics: 2003-04—Continued

| Selected teacher and school characteristic | Number of mathematics teachers | Major in mathematics |  |  | No major in mathematics |  |  | Total certified in mathematics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in mathematics | Not certified in mathematics | Total | Certified in mathematics | Not certified in mathematics |  |
| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Less than 20 | 1,984.1 | 1.62 | 1.90 | 1.08 | 1.62 | 1.27 | 0.94 | 1.48 |
| 20 to 59.9 | 1,878.7 | 2.33 | 2.73 | 1.61 | 2.33 | 1.83 | 1.46 | 2.29 |
| 60 or more | 2,521.4 | 2.53 | 2.66 | 2.01 | 2.53 | 1.96 | 1.76 | 2.53 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 2,998.4 | 1.51 | 2.00 | 1.35 | 1.51 | 1.01 | 0.98 | 1.73 |
| 35 to 49.9 | 1,926.0 | 2.19 | 2.59 | 1.61 | 2.19 | 1.97 | 2.12 | 2.67 |
| 50 to 74.9 | 1,696.7 | 4.02 | 3.92 | 2.00 | 4.02 | 3.52 | 1.92 | 2.42 |
| 75 or more | 850.9 | 5.57 | 5.01 | 4.14 | 5.57 | 2.26 | 5.44 | 4.96 |
| Did not participate in program | 565.0 | 5.00 | 6.87 | 5.93 | 5.00 | 3.84 | 3.59 | 6.60 |

T"All teachers with a mathematics main assignment" includes the subsample of high school-level teachers who reported a main assignment in algebra (elementary, intermediate, or advanced), basic and general mathematics, business and applied math, calculus and precalculus, computer science, geometry, prealgebra, statistics and probability, or trigonometry.
${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04

Table A-5. Standard errors for: Number of public high school-level teachers with a main assignment in science and the percentage with a major and certification in science, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic | Number of science teachers | Major in science |  |  | No major in science |  |  | Total certified in science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in science | Not certified in science | Total | Certified in science | Not certified in science |  |
| All teachers with a science main assignment ${ }^{1}$ | 4,291.1 | 1.02 | 1.12 | 1.05 | 1.02 | 0.75 | 0.68 | 1.13 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 406.1 | 8.58 | 8.03 | 4.20 | 8.58 | 2.87 | 8.69 | 8.31 |
| 11-18 | 1,284.4 | 1.81 | 2.72 | 2.44 | 1.81 | 1.08 | 1.59 | 2.76 |
| 19-27 | 2,774.4 | 1.10 | 1.65 | 1.48 | 1.10 | 0.93 | 0.65 | 1.64 |
| 28 or more students | 2,298.5 | 2.48 | 2.97 | 2.85 | 2.48 | 2.22 | 0.81 | 2.78 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 1,423.0 | 1.68 | 3.96 | 3.80 | 1.68 | 0.76 | 1.67 | 3.96 |
| 4-9 | 1,855.8 | 1.48 | 2.14 | 2.04 | 1.48 | 1.33 | 0.90 | 2.02 |
| 10-19 | 1,873.7 | 2.19 | 2.33 | 1.50 | 2.19 | 1.40 | 1.50 | 1.92 |
| 20 or more | 1,824.0 | 1.88 | 2.22 | 1.27 | 1.88 | 1.73 | 0.76 | 1.55 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 258.0 | 6.83 | 9.01 | 8.71 | 6.83 | 1.68 | 6.95 | 9.41 |
| Traditional public school | 4,270.3 | 1.03 | 1.12 | 1.06 | 1.03 | 0.76 | 0.69 | 1.14 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 1,846.7 | 1.77 | 2.45 | 2.36 | 1.77 | 1.57 | 1.16 | 2.42 |
| Urban fringe/large town | 3,086.5 | 1.41 | 1.61 | 1.34 | 1.41 | 1.05 | 0.86 | 1.39 |
| Rural/small town | 1,219.3 | 2.07 | 2.81 | 2.00 | 2.07 | 1.89 | 1.19 | 2.40 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 403.5 | 9.23 | 8.44 | 2.93 | 9.23 | 10.04 | 5.00 | 5.21 |
| 100-199 | 377.3 | 6.99 | 7.17 | 4.82 | 6.99 | 3.74 | 6.09 | 6.72 |
| 200-499 | 1,169.1 | 2.44 | 3.06 | 2.18 | 2.44 | 2.25 | 1.09 | 2.49 |
| 500-749 | 1,318.3 | 2.02 | 3.20 | 2.63 | 2.02 | 1.60 | 1.07 | 2.82 |
| 750-999 | 825.4 | 1.95 | 3.28 | 2.89 | 1.95 | 1.45 | 1.50 | 3.11 |
| 1,000 or more | 3,145.2 | 1.39 | 1.48 | 1.50 | 1.39 | 1.09 | 0.87 | 1.55 |

Table A-5. Standard errors for: Number of public high school-level teachers with a main assignment in science and the percentage with a major and certification in science, by selected teacher and school characteristics: 2003-04-Continued

| Percent of K-12 students in school who are of a racial/ethnic minority ${ }^{2}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 20 | 2,283.7 | 1.03 | 1.45 | 1.28 | 1.03 | 0.80 | 0.59 | 1.33 |
| 20 to 59.9 | 1,886.3 | 1.85 | 2.92 | 2.42 | 1.85 | 1.33 | 1.40 | 2.88 |
| 60 or more | 1,850.6 | 2.37 | 2.55 | 2.33 | 2.37 | 1.91 | 1.16 | 2.25 |
| Percent of K-12 students in school who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 3,344.4 | 1.16 | 1.56 | 1.17 | 1.16 | 0.85 | 0.82 | 1.40 |
| 35 to 49.9 | 1,586.6 | 2.53 | 3.15 | 2.26 | 2.53 | 2.30 | 1.30 | 2.35 |
| 50 to 74.9 | 1,320.2 | 2.74 | 4.57 | 4.16 | 2.74 | 2.44 | 1.21 | 4.37 |
| 75 or more | 884.4 | 4.51 | 5.95 | 5.40 | 4.51 | 3.69 | 2.78 | 5.41 |
| Did not participate in program | 601.1 | 4.17 | 5.41 | 4.83 | 4.17 | 1.71 | 4.16 | 5.55 |

[^4]SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table A-6. Standard errors for: Number of public high school-level teachers with a main assignment in social science and the percentage with a major and certification in social science, by selected teacher and school characteristics: 2003-04

| Selected teacher and school characteristic | Number of social science teachers | Major in social science |  |  | No major in social science |  |  | Total certified in social science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in social science | Not certified in social science | Total | Certified in social science | Not certified in social science |  |
| All teachers with a social science main assignment ${ }^{1}$ | 3,391.9 | 0.97 | 1.39 | 1.08 | 0.97 | 0.86 | 0.64 | 1.15 |
| Average class size |  |  |  |  |  |  |  |  |
| 10 or fewer students | 468.7 | 8.82 | 8.16 | 4.66 | 8.82 | 1.43 | 8.96 | 8.17 |
| 11-18 | 1,436.1 | 3.33 | 3.52 | 3.68 | 3.33 | 3.36 | 1.40 | 3.70 |
| 19-27 | 2,364.4 | 1.30 | 1.70 | 1.11 | 1.30 | 1.14 | 0.75 | 1.34 |
| 28 or more students | 2,545.1 | 1.75 | 2.45 | 1.80 | 1.75 | 1.74 | 0.85 | 1.77 |
| Years of teaching experience |  |  |  |  |  |  |  |  |
| 3 or fewer | 1,239.6 | 2.69 | 4.11 | 3.47 | 2.69 | 2.11 | 1.57 | 3.65 |
| 4-9 | 1,886.2 | 1.92 | 2.59 | 2.30 | 1.92 | 1.49 | 1.11 | 2.36 |
| 10-19 | 1,632.7 | 2.13 | 2.47 | 1.64 | 2.13 | 1.96 | 0.93 | 1.83 |
| 20 or more | 1,827.6 | 1.71 | 2.18 | 1.58 | 1.71 | 1.61 | 1.25 | 1.79 |
| School classification |  |  |  |  |  |  |  |  |
| Charter school | 267.0 | 6.20 | 8.84 | 9.42 | 6.20 | 3.84 | 4.66 | 9.21 |
| Traditional public school | 3,351.1 | 0.97 | 1.39 | 1.05 | 0.97 | 0.87 | 0.64 | 1.14 |
| Community type |  |  |  |  |  |  |  |  |
| Central city | 2,065.8 | 1.95 | 2.81 | 2.23 | 1.95 | 1.96 | 1.04 | 2.43 |
| Urban fringe/large town | 2,739.4 | 1.12 | 1.86 | 1.71 | 1.12 | 1.10 | 0.76 | 1.81 |
| Rural/small town | 1,085.6 | 2.15 | 2.22 | 1.60 | 2.15 | 1.63 | 1.51 | 1.88 |
| Student enrollment |  |  |  |  |  |  |  |  |
| Less than 100 | 632.3 | 9.13 | 8.96 | 14.62 | 9.13 | 3.77 | 7.78 | 10.10 |
| 100-199 | 513.3 | 4.87 | 6.82 | 6.06 | 4.87 | 3.48 | 3.84 | 6.06 |
| 200-499 | 1,622.8 | 2.82 | 2.85 | 2.09 | 2.82 | 2.73 | 1.91 | 2.80 |
| 500-749 | 1,202.5 | 3.27 | 3.85 | 2.32 | 3.27 | 3.08 | 1.27 | 2.60 |
| 750-999 | 926.2 | 2.84 | 4.00 | 3.13 | 2.84 | 2.65 | 1.11 | 3.22 |
| 1,000 or more | 2,832.3 | 1.25 | 1.73 | 1.32 | 1.25 | 1.13 | 0.83 | 1.43 |

Table A-6. Standard errors for: Number of public high school-level teachers with a main assignment in social science and the percentage with a major and certification in social science, by selected teacher and school characteristics: 2003-04-Continued

| Selected teacher and school characteristic | Number of social science teachers | Major in social science |  |  | No major in social science |  |  | Total certified in social science |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified in social science | Not certified in social science | Total | Certified in social science | Not certified in social science |  |
| Percent of K-12 students in schoo who were approved for free or reduced-price lunches |  |  |  |  |  |  |  |  |
| Less than 35 | 2,898.5 | 1.15 | 1.75 | 1.45 | 1.15 | 1.04 | 0.72 | 1.64 |
| 35 to 49.9 | 1,436.9 | 2.57 | 3.16 | 2.08 | 2.57 | 2.03 | 1.76 | 2.66 |
| 50 to 74.9 | 1,474.6 | 2.97 | 3.84 | 3.02 | 2.97 | 2.99 | 1.27 | 3.33 |
| 75 or more | 890.7 | 4.43 | 5.57 | 5.58 | 4.43 | 2.71 | 3.44 | 5.56 |
| Did not participate in program | 521.8 | 5.35 | 6.51 | 5.09 | 5.35 | 4.99 | 2.15 | 5.58 |

"All teachers with a social science main assignment" includes the subsample of high school-level teachers who reported a main assignment in social studies (general), anthropology, economics, geography, government/civics, history, Native American studies, psychology, or sociology.
Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04

Table A-7. Standard errors for: Number of public high school-level teachers who reported a particular main assignment and the percentage with a major in their main assignment awarded by a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

| Selected main assignment | Number of teachers | Major in main assignment awarded by a department, college, or school of education |  |  | No major in main assignment awarded by a department, college, or school of education |  |  | Total certified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified | Not certified | Total | Certified | Not certified |  |
| English | 4,830.4 | 1.28 | 1.34 | 0.76 | 1.28 | 1.19 | 0.86 | 1.06 |
| Mathematics | 3,592.9 | 1.60 | 1.66 | 0.59 | 1.60 | 1.17 | 1.08 | 1.27 |
| Science | 4,291.1 | 1.42 | 1.33 | 0.62 | 1.42 | 1.41 | 1.06 | 1.13 |
| Biology/life sciences | 2,275.1 | 2.58 | 2.44 | 1.16 | 2.58 | 1.96 | 2.04 | 2.02 |
| Physical science | 3,090.7 | 1.65 | 1.64 | 0.87 | 1.65 | 1.91 | 1.95 | 1.96 |
| Chemistry | 1,400.8 | 2.41 | 2.11 | 1.51 | 2.41 | 3.14 | 2.99 | 3.24 |
| Earth sciences | 1,347.8 | 4.44 | 4.40 | 2.10 | 4.44 | 4.69 | 4.85 | 4.93 |
| Physics | 1,084.1 | 4.89 | 4.36 | 2.59 | 4.89 | 5.02 | 6.07 | 5.93 |
| Social science | 3,391.9 | 1.74 | 1.75 | 0.96 | 1.74 | 1.75 | 0.80 | 1.15 |
| Economics | 660.7 | 3.46 | 2.29 | 2.66 | 3.46 | 3.17 | 4.97 | 3.95 |
| Geography | 986.7 | 2.87 | 1.21 | 2.90 | 2.87 | 3.08 | 4.30 | 3.51 |
| Government/civics | 1,157.5 | 1.56 | 1.21 | 0.98 | 1.56 | 2.63 | 3.13 | 2.87 |
| History | 2,603.7 | 2.30 | 1.91 | 1.72 | 2.30 | 1.63 | 2.08 | 2.03 |
| French | 844.8 | 4.94 | 4.77 | 2.78 | 4.94 | 3.96 | 2.74 | 3.51 |
| German | 492.4 | 6.70 | 6.97 | 3.76 | 6.70 | 6.98 | 4.11 | 5.81 |
| Latin | 374.2 | 11.03 | 11.02 | 2.98 | 11.03 | 10.05 | 7.63 | 7.66 |
| Spanish | 2,003.1 | 2.74 | 2.98 | 1.66 | 2.74 | 2.62 | 1.68 | 2.28 |
| Art/Arts or crafts ${ }^{1}$ | 1,977.3 | 2.48 | 2.81 | 1.63 | 2.48 | 2.11 | 1.71 | 2.18 |
| Music ${ }^{1}$ | 2,020.4 | 2.16 | 2.59 | 2.48 | 2.16 | 1.97 | 1.10 | 2.49 |
| Dance/theater ${ }^{1}$ | 809.7 | 5.68 | 5.50 | 1.48 | 5.68 | 5.94 | 4.81 | 4.97 |

${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

Table A-8. Standard errors for: Number of public high school-level teachers who reported a particular main assignment and the percentage with a major in their main assignment awarded outside a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

| Selected main assignment | Number of teachers | Major in main assignment awarded outside a department, college, or school of education |  |  | No major in main assignment awarded outside a department, college, or school of education |  |  | Total certified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Certified | Not certified | Total | Certified | Not certified |  |
| English | 4,830.4 | 1.32 | 1.25 | 0.63 | 1.32 | 1.43 | 0.96 | 1.06 |
| Mathematics | 3,592.9 | 1.21 | 1.05 | 0.60 | 1.21 | 1.57 | 1.03 | 1.27 |
| Science | 4,291.1 | 1.65 | 1.42 | 0.99 | 1.65 | 1.52 | 0.91 | 1.13 |
| Biology/life sciences | 2,275.1 | 3.05 | 2.15 | 1.83 | 3.05 | 2.74 | 1.76 | 2.02 |
| Physical science | 3,090.7 | 2.03 | 1.70 | 1.32 | 2.03 | 1.86 | 1.84 | 1.96 |
| Chemistry | 1,400.8 | 3.14 | 2.46 | 1.81 | 3.14 | 3.26 | 2.97 | 3.24 |
| Earth sciences | 1,347.8 | 3.38 | 3.24 | 1.17 | 3.38 | 3.95 | 4.98 | 4.93 |
| Physics | 1,084.1 | 4.46 | 3.41 | 3.77 | 4.46 | 5.56 | 5.04 | 5.93 |
| Social science | 3,391.9 | 1.62 | 1.63 | 0.68 | 1.62 | 1.66 | 1.10 | 1.15 |
| Economics | 660.7 | 3.80 | 2.41 | 2.69 | 3.80 | 3.27 | 4.59 | 3.95 |
| Geography | 986.7 | 1.12 | 0.82 | 0.50 | 1.12 | 3.54 | 3.52 | 3.51 |
| Government/civics | 1,157.5 | 1.56 | 1.12 | 1.15 | 1.56 | 2.79 | 2.86 | 2.87 |
| History | 2,603.7 | 2.04 | 1.40 | 1.51 | 2.04 | 1.99 | 2.13 | 2.03 |
| French | 844.8 | 4.44 | 3.84 | 2.65 | 4.44 | 4.75 | 2.84 | 3.51 |
| German | 492.4 | 7.20 | 7.86 | 3.80 | 7.20 | 7.43 | 3.79 | 5.81 |
| Latin | 374.2 | 10.11 | 9.58 | 4.72 | 10.11 | 9.62 | 6.63 | 7.66 |
| Spanish | 2,003.1 | 2.29 | 2.24 | 0.93 | 2.29 | 2.93 | 2.20 | 2.28 |
| Art/Arts or crafts ${ }^{1}$ | 1,977.3 | 2.47 | 2.17 | 1.57 | 2.47 | 2.68 | 1.71 | 2.18 |
| Music ${ }^{1}$ | 2,020.4 | 2.00 | 2.06 | 0.87 | 2.00 | 2.55 | 2.36 | 2.49 |
| Dance/theater ${ }^{1}$ | 809.7 | 4.98 | 5.21 | 1.78 | 4.98 | 5.41 | 4.76 | 4.97 |

${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2003-04.

Table A-9. Standard errors for: Number of public high school-level teachers who reported a particular main assignment and the percentage with majors in main assignment awarded both within and outside a department, college, or school of education and a certification in that main assignment, by selected main assignments: 2003-04

|  |  | Mumber | Majors in main assignment awarded both within and outside |
| :--- | ---: | ---: | ---: | ---: |
|  | a department, college, or school of education |  |  |

$\dagger$ Not applicable.
${ }^{1}$ Teachers of art/arts or crafts, music, and dance/theater were allowed to report an ungraded or secondary-level certification.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School
Teacher Data File," 2003-04.


[^0]:    See notes at end of table.

[^1]:    ! Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.

[^2]:    Interpret data with caution. The standard error for this estimate is equal to 50 percent or more of the estimate's value.
    1 "All teachers with a mathematics main assignment" includes the subsample of high school-level teachers who reported a main assignment in algebra (elementary, intermediate, or advanced), basic and general mathematics, business and applied math, calculus and precalculus, computer science, geometry, prealgebra, statistics and probability, or trigonometry.
    ${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.
    NOTE: Teachers include traditional public and public charter teachers who taught departmentalized classes to students in any of grades 10-12, or grade 9 and no grade lower. Included in the "Major in mathematics" columns are all teachers, regardless of whether the major was earned within or outside the school/college of education. Majors in mathematics are credited if they were earned at the bachelor's degree level or higher. "Certified in mathematics" columns contain teachers with a regular/probationary certification in mathematics and at the secondary level. Detail may not sum to totals because of rounding.
    SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," $2003-04$.

[^3]:    See notes at end of table.

[^4]:    "All teachers with a science main assignment" includes the subsample of high school-level teachers who reported a main assignment in science (general), biology/life sciences, chemistry, Earth sciences, integrated science, physical science, or physics.
    ${ }^{2}$ Minority enrollment data are collected at the school level and placed on the teacher file. In cases where the sampled school did not respond, data were imputed from the Common Core of Data (CCD). In some cases, CCD data were not available for the school's minority enrollment. A very small number of teachers from these schools are missing data for this variable.

