

APPENDIX A. Chapter 2 Data Tables

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TABLE A-1. Percentage of grade K–12 public school students in classes taught by teachers with full state certification, by selected student and school characteristics: 2011–12

(Standard errors in parentheses)						
Characteristic	All public school students		Students with disabilities ¹		English language learners ²	
All public school students	94.3	(0.36)	93.7	(0.54)	93.2	(1.10)
School location						
City	93.6	(1.02)	92.2	(1.72)	93.9	(1.57)
Suburban	94.5	(0.67)	95.1	(0.45)	92.3	(2.25)
Town	94.9	(0.76)	93.3	(1.27)	93.5	(1.75)
Rural	94.5	(0.76)	93.7	(1.27)	93.0	(1.64)
School level						
Primary	94.1	(0.77)	93.9	(1.05)	93.8	(1.63)
Middle	94.9	(0.43)	93.8	(0.54)	93.0	(1.03)
High	94.4	(0.48)	93.6	(0.70)	92.6	(1.07)
Combined	92.1	(2.54)	92.4	(5.27)	89.8	(7.39)

¹ Based on the 12 percent of K–12 public school students who have an Individualized Education Program (IEP).

² Based on the 9 percent of K–12 public school students who are of limited-English proficiency or are English language learners (ELLs).

NOTE: Teachers are counted as certified if they reported having a “regular or standard state certificate or advanced professional certificate” or “certificate issued after satisfying all requirements except the completion of a probationary period.”

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Teacher Data File,” 2011–12.

TABLE A-2. Percentage of grade K–12 public school students in classes taught by teachers with full state certification, by school location, student characteristics, and state: 2011–12

(Standard errors in parentheses)														
State	All public school students	School location				Students with disabilities ¹	English language learners ²							
		City	Suburban	Town	Rural									
United States	94.3	(0.36)	93.6	(1.02)	94.5	(0.67)	94.9	(0.76)	94.5	(0.76)	93.7	(0.54)	93.2	(1.10)
Alabama	96.3	(0.87)	97.3	(2.03)	99.2	(0.57)	94.0	(2.45)	95.4	(1.11)	94.6	(2.36)	96.3	(3.58)
Alaska	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Arizona	88.7	(3.55)	88.2	(2.91)	92.7	(3.29)	84.8	(5.12)	88.7	(10.19)	88.1	(3.24)	91.2	(2.76)
Arkansas	95.1	(1.22)	95.5	(1.99)	96.3	(4.25)	93.0	(3.40)	95.3	(2.06)	94.6	(1.70)	98.5	(0.73)
California	91.8	(1.06)	91.5	(1.29)	91.8	(2.41)	91.4	(3.40)	92.9	(1.88)	91.8	(1.20)	90.1	(1.52)
Colorado	94.8	(1.24)	96.9	(1.29)	97.0	(1.92)	87.8	(5.47)	89.5	(3.73)	94.5	(1.88)	88.8	(5.94)
Connecticut	97.4	(0.93)	97.7	(1.55)	98.1	(0.80)	95.7	(5.31)	95.6	(3.05)	97.9	(1.12)	98.1	(0.98)
Delaware	95.1	(3.62)	91.8	(5.03)	93.9	(6.92)	97.7	(2.22)	97.4	(1.55)	91.2	(5.36)	97.6	(2.16)
District of Columbia	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Georgia	97.8	(1.00)	97.8	(2.10)	98.3	(2.46)	99.1	(0.86)	96.8	(1.55)	95.9	(2.44)	98.1	(2.07)
Hawaii	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Idaho	96.3	(2.31)	98.0	(3.81)	91.3	(9.14)	93.5	(2.77)	98.6	(0.85)	95.3	(2.39)	97.0	(1.19)
Illinois	97.0	(1.46)	98.5	(0.97)	94.9	(3.23)	97.6	(1.85)	99.1	(0.49)	97.1	(1.67)	85.0	(10.96)
Indiana	96.2	(1.23)	97.4	(1.75)	93.7	(3.56)	95.7	(3.40)	97.2	(1.40)	94.0	(2.58)	97.6	(1.55)
Iowa	98.9	(0.46)	98.7	(1.32)	96.3	(4.02)	99.5	(0.28)	99.3	(0.33)	99.1	(0.40)	99.5	(0.42)
Kansas	95.9	(1.71)	98.9	(0.84)	98.8	(1.00)	98.0	(0.79)	92.2	(4.13)	95.3	(1.65)	96.3	(1.79)
Kentucky	94.2	(1.50)	93.9	(2.36)	97.0	(1.58)	94.4	(2.22)	92.7	(3.37)	92.2	(2.69)	95.6	(2.83)
Louisiana	91.5	(2.05)	86.8	(6.15)	96.7	(1.77)	93.7	(3.14)	90.9	(3.49)	89.7	(2.17)	93.2	(3.93)
Maine	96.4	(1.15)	97.5	(1.78)	98.6	(3.84)	95.2	(2.67)	96.1	(1.42)	96.4	(1.15)	97.8	(1.09)

See notes at end of table.

TABLE A-2. Percentage of grade K-12 public school students in classes taught by teachers with full state certification, by school location, student characteristics, and state: 2011-12—Continued

(Standard errors in parentheses)									
State	All public school students	School location				Students with disabilities ¹	English language learners ²		
		City	Suburban	Town	Rural				
Maryland	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Massachusetts	91.6 (2.03)	89.9 (3.70)	91.9 (2.50)	99.8 (0.32)	90.9 (5.83)	92.0 (1.85)	90.6 (4.01)	90.6 (4.01)	90.6 (4.01)
Michigan	94.2 (1.64)	95.8 (2.58)	92.6 (3.02)	91.2 (4.61)	96.8 (1.14)	95.9 (0.98)	96.5 (1.46)	96.5 (1.46)	96.5 (1.46)
Minnesota	93.5 (2.05)	89.4 (7.22)	92.6 (2.97)	95.9 (1.45)	96.9 (0.79)	93.5 (1.53)	88.1 (6.00)	88.1 (6.00)	88.1 (6.00)
Mississippi	94.8 (1.22)	91.8 (4.97)	100.0 ³ (†)	93.6 (2.43)	96.1 (1.27)	94.8 (1.50)	95.6 (4.15)	95.6 (4.15)	95.6 (4.15)
Missouri	97.4 (0.64)	97.8 (1.57)	98.7 (0.68)	96.0 (1.97)	96.9 (1.22)	96.5 (1.20)	98.5 (1.00)	98.5 (1.00)	98.5 (1.00)
Montana	96.1 (1.56)	91.2 (6.61)	‡ (†)	97.7 (1.42)	96.8 (2.34)	96.6 (1.38)	72.9 (19.68)	72.9 (19.68)	72.9 (19.68)
Nebraska	99.4 (0.49)	100.0 ³ (†)	100.0 ³ (†)	99.0 (1.61)	99.0 (0.49)	99.4 (0.35)	99.6 (0.55)	99.6 (0.55)	99.6 (0.55)
Nevada	92.2 (2.34)	95.5 (2.37)	88.2 (4.57)	99.1 (1.18)	89.3 (6.03)	94.0 (2.32)	91.2 (5.06)	91.2 (5.06)	91.2 (5.06)
New Hampshire	95.2 (2.27)	97.3 (5.15)	95.5 (2.12)	98.9 (1.48)	93.4 (4.41)	91.5 (4.83)	98.0 (2.32)	98.0 (2.32)	98.0 (2.32)
New Jersey	98.1 (0.57)	92.8 (5.84)	98.4 (0.54)	98.1 (3.06)	98.8 (0.97)	97.9 (0.63)	97.0 (1.61)	97.0 (1.61)	97.0 (1.61)
New Mexico	94.0 (2.04)	94.4 (5.69)	98.2 (2.41)	95.7 (1.72)	91.1 (2.40)	94.5 (1.16)	91.0 (3.90)	91.0 (3.90)	91.0 (3.90)
New York	93.3 (2.17)	91.9 (5.76)	95.1 (1.32)	97.0 (1.71)	89.9 (6.06)	89.9 (3.90)	95.1 (5.17)	95.1 (5.17)	95.1 (5.17)
North Carolina	97.7 (0.91)	98.9 (1.00)	98.1 (2.38)	97.6 (2.83)	97.2 (1.47)	96.2 (1.90)	96.9 (2.12)	96.9 (2.12)	96.9 (2.12)
North Dakota	90.1 (3.50)	97.6 (1.54)	‡ (†)	88.2 (8.82)	93.6 (3.19)	89.2 (3.51)	83.0 (10.17)	83.0 (10.17)	83.0 (10.17)
Ohio	96.4 (0.91)	92.6 (3.13)	96.7 (1.51)	96.9 (1.37)	98.0 (0.64)	95.8 (0.97)	89.4 (4.84)	89.4 (4.84)	89.4 (4.84)
Oklahoma	93.9 (1.30)	90.2 (3.36)	93.9 (2.84)	95.0 (1.75)	95.0 (1.94)	93.9 (1.42)	90.6 (4.00)	90.6 (4.00)	90.6 (4.00)
Oregon	92.4 (2.98)	88.7 (7.97)	93.6 (2.80)	96.8 (2.71)	92.5 (3.73)	89.8 (4.28)	94.0 (2.65)	94.0 (2.65)	94.0 (2.65)
Pennsylvania	93.5 (2.40)	97.6 (1.94)	94.0 (1.54)	97.5 (1.74)	88.4 (6.62)	90.9 (4.82)	96.7 (1.59)	96.7 (1.59)	96.7 (1.59)
Rhode Island	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
South Carolina	95.4 (1.55)	97.3 (2.02)	94.7 (3.93)	94.9 (3.79)	95.1 (1.61)	94.1 (2.00)	96.4 (2.31)	96.4 (2.31)	96.4 (2.31)
South Dakota	95.3 (2.13)	97.4 (1.76)	‡ (†)	99.3 (0.75)	92.5 (4.26)	95.0 (2.35)	98.9 (1.36)	98.9 (1.36)	98.9 (1.36)
Tennessee	96.2 (1.46)	94.9 (4.50)	99.1 (1.32)	95.2 (3.30)	96.0 (2.37)	95.9 (1.43)	96.0 (2.60)	96.0 (2.60)	96.0 (2.60)
Texas	94.5 (1.51)	93.2 (2.25)	97.1 (1.05)	95.7 (2.24)	93.3 (4.03)	94.5 (1.07)	96.1 (1.35)	96.1 (1.35)	96.1 (1.35)
Utah	95.1 (1.56)	96.0 (2.40)	94.1 (2.64)	97.4 (1.21)	95.6 (2.09)	96.2 (0.98)	97.1 (1.22)	97.1 (1.22)	97.1 (1.22)
Vermont	95.3 (1.43)	92.6 (5.50)	93.3 (4.52)	97.9 (1.17)	95.2 (2.06)	95.8 (1.15)	97.2 (1.33)	97.2 (1.33)	97.2 (1.33)
Virginia	91.6 (3.90)	97.8 (1.38)	85.3 (9.31)	96.0 (2.22)	94.1 (4.86)	93.5 (2.15)	92.8 (3.70)	92.8 (3.70)	92.8 (3.70)
Washington	89.5 (6.45)	86.7 (13.61)	96.2 (1.16)	73.9 (15.12)	96.4 (1.61)	90.2 (4.66)	88.0 (7.34)	88.0 (7.34)	88.0 (7.34)
West Virginia	96.7 (1.04)	100.0 ³ (†)	97.8 (1.15)	98.4 (1.66)	95.2 (1.77)	96.6 (1.22)	99.6 (0.70)	99.6 (0.70)	99.6 (0.70)
Wisconsin	97.4 (0.78)	97.8 (2.21)	96.1 (1.67)	98.4 (0.90)	97.3 (1.13)	97.2 (0.74)	98.6 (0.70)	98.6 (0.70)	98.6 (0.70)
Wyoming	95.8 (2.82)	98.7 (1.14)	‡ (†)	99.9 (0.07)	90.3 (7.05)	96.0 (2.07)	91.9 (5.74)	91.9 (5.74)	91.9 (5.74)

† Not applicable.

‡ Reporting standards not met. The coefficient of variation (CV) for this estimate is 50 percent or greater (i.e., the standard error is 50 percent or more of the estimate), or the response rate for the state is below 50 percent, or there are too few cases for a reliable estimate.

¹ Based on the 12 percent of K-12 public school students who have an Individualized Education Program (IEP).

² Based on the 9 percent of K-12 public school students who are of limited-English proficiency or are English language learners (ELLs).

³ Rounds to 100 percent.

NOTE: Teachers are counted as certified if they reported having state certification of "regular or standard state certificate or advanced professional certificate" or "certificate issued after satisfying all requirements except the completion of a probationary period."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2011-12.

TABLE A-3. Percentage of students in primary, middle grade, and high school public school classes, by teacher certification for that grade range: 2011-12

(Standard errors in parentheses)						
Characteristic	Taught by teachers with full state certification				Taught by teachers without full state certification	
	Certified in grade range		Not certified in grade range			
All public school students	92.3	(0.42)	2.0	(0.20)	5.7	(0.37)
Primary (grades K-5)	91.6	(1.15)	2.6	(0.50)	5.8	(1.05)
Middle (grades 6-8)	92.1	(0.54)	2.3	(0.32)	5.6	(0.47)
High (grades 9-12)	93.3	(0.55)	0.9	(0.13)	5.8	(0.54)

NOTE: Teachers are counted as having full state certification if they reported having a "regular or standard state certificate or advanced professional certificate" or "certificate issued after satisfying all requirements except the completion of a probationary period." Teachers are counted as having certification in grade range if they were certified in "early childhood, preschool, or at least one of grades K-5" for primary students, were certified in "at least one of grades 6-8" for middle students, or were certified in "at least one of grades 9-12" for high students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Teacher Data File," 2011-12.

TABLE A-4. Percentage distribution of students in grade K–5 public school classes, by teacher certification in grade range, school location, and student characteristics: 2011–12

(Standard errors in parentheses)						
Characteristic	Taught by teachers with full state certification				Taught by teachers without full state certification	
	Certified in grade range		Not certified in grade range			
All public school students	91.6	(1.15)	2.6	(0.50)	5.8	(1.05)
School location						
City	90.6	(2.44)	3.4 !	(1.29)	5.9 !	(2.43)
Suburban	91.9	(2.27)	1.7 !	(0.52)	6.4 !	(2.29)
Town	90.8	(2.96)	2.7 !	(1.33)	6.5 !	(2.53)
Rural	92.7	(1.82)	3.0 !	(1.14)	4.2 !	(1.50)
Students with disabilities ¹	92.7	(1.09)	2.1 !	(0.66)	5.2	(0.90)
English language learners ²	91.9	(1.91)	2.3 !	(0.76)	5.8 !	(1.77)

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 percent and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

¹ Based on the 12 percent of K–12 public school students who have an Individualized Education Program (IEP).

² Based on the 9 percent of K–12 public school students who are of limited-English proficiency or are English language learners (ELLs).

NOTE: Teachers were teaching at least one grade K–5 and no other grades during the 2011–12 school year. Teachers are counted as having full state certification if they reported having “regular or standard state certificate or advanced professional certificate” or “certificate issued after satisfying all requirements except the completion of a probationary period.” Teachers are counted as having certification in grade range if they reported certification in “early childhood, preschool, or at least one of grades K–5.” Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Teacher Data File,” 2011–12.

TABLE A-5. Percentage of students in middle grade and high school departmentalized public school classes taught by a teacher certified in the subject area and percentage distribution of those students, by the teacher’s certification and major status in selected subject areas: 2011–12

(Standard errors in parentheses)										
Level and selected subject area	Taught by teacher certified in subject area	Taught by teachers with various certification and major statuses in subject area								
		Both certification and major		Certification only		Major only		Neither major nor certification		
Middle grade students in grades 6–8										
English	57.9	(1.80)	37.5	(1.75)	20.4	(1.58)	10.2	(1.74)	31.9	(1.74)
Mathematics	54.4	(2.16)	23.7	(1.78)	30.7	(1.74)	7.1	(1.04)	38.5	(2.05)
Science	58.1	(2.13)	34.3	(2.31)	23.8	(1.75)	11.1	(1.47)	30.8	(1.86)
Social science	60.6	(2.61)	39.6	(2.41)	20.9	(2.14)	12.1	(1.77)	27.4	(1.79)
General elementary education	64.9	(9.05)	53.2	(8.26)	11.7 !	(5.16)	23.6 !	(9.83)	11.5	(3.05)
High school students in grades 9–12										
English	81.7	(1.38)	68.6	(1.63)	13.0	(1.22)	9.9	(1.19)	8.5	(0.94)
Mathematics	80.8	(1.57)	61.5	(1.77)	19.3	(1.44)	8.7	(1.30)	10.5	(1.08)
Science	84.6	(2.69)	72.1	(2.72)	12.5	(1.36)	6.7	(0.89)	8.7 !	(2.66)
Social science	82.3	(1.38)	67.6	(1.84)	14.7	(1.55)	11.3	(1.35)	6.4	(0.95)

! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 percent and 50 percent (i.e., the standard error is at least 30 percent and less than 50 percent of the estimate).

NOTE: Middle grade includes any classes taught to students in any of grades 6–8. High school includes classes taught to students in any of grades 9–12. Majors are included regardless of whether they are held within or outside the school/college of education. Majors in main assignment are credited if they are held at the bachelor’s degree level or higher. A certification is credited if it is a regular or standard state certificate or a probationary in-subject certification and in any grades 6–8 (for middle grades) or at the secondary level (for high school). Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Teacher Data File,” 2011–12.

TABLE A-6. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)														
2013														
School characteristic	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	93.4 (0.30)	93.4 (0.35)	92.7 (0.50)	93.3 (0.53)	95.5 (0.51)	96.8 (1.09)	93.6 (1.28)	92.8 (0.67)						
Location														
City	93.5 (0.36)	94.9 (0.55)	91.6 (0.65)	93.3 (0.65)	95.4 (0.84)	98.8 (0.75)	94.5 (1.14)	92.5 (1.10)						
Suburban	94.2 (0.46)	93.7 (0.56)	94.0 (0.75)	94.9 (0.84)	95.7 (0.74)	96.7 (2.03)	96.4 (1.41)	94.7 (0.85)						
Town	90.8 (1.07)	90.5 (1.01)	94.1 (1.70)	90.5 (1.99)	89.2 (4.12)	93.8 (3.34)	89.8 (5.26)	87.3 (2.92)						
Rural	93.2 (0.69)	93.5 (0.65)	92.8 (1.77)	91.0 (2.07)	96.7 (0.94)	95.8 (2.09)	94.0 (0.99)	92.7 (1.58)						
Minority enrollment														
75 percent or more	93.2 (0.57)	94.7 (1.03)	92.1 (0.75)	93.4 (0.76)	95.4 (1.13)	97.0 (1.33)	90.3 (3.08)	94.1 (1.54)						
Less than 75 percent	93.4 (0.34)	93.3 (0.36)	93.5 (0.74)	93.2 (0.76)	95.5 (0.54)	96.5 (1.67)	95.6 (0.80)	92.5 (0.72)						
2015														
School characteristic	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	91.9 (0.32)	92.2 (0.34)	89.9 (0.72)	92.0 (0.65)	93.9 (0.88)	95.9 (1.67)	91.1 (1.37)	91.9 (0.79)						
Location														
City	90.1 (0.71)	92.5 (0.77)	86.1 (1.27)	90.0 (0.94)	91.7 (1.93)	93.3 (3.85)	91.3 (2.63)	92.5 (1.70)						
Suburban	93.0 (0.43)	92.8 (0.44)	92.7 (0.97)	93.0 (1.10)	95.9 (0.57)	96.7 (1.27)	90.4 (3.89)	91.7 (1.20)						
Town	91.9 (0.87)	91.5 (0.93)	93.7 (1.31)	92.8 (1.82)	91.4 (2.53)	99.1 (0.49)	88.0 (4.11)	88.8 (2.69)						
Rural	92.4 (0.59)	91.5 (0.75)	94.4 (0.85)	96.0 (1.17)	93.3 (2.40)	100.0 ¹ (†)	92.9 (1.21)	93.3 (1.28)						
Minority enrollment														
75 percent or more	90.4 (0.81)	91.8 (1.38)	88.2 (1.13)	90.6 (1.03)	95.5 (1.20)	95.7 (2.71)	91.1 (2.14)	93.7 (2.03)						
Less than 75 percent	92.5 (0.33)	92.2 (0.35)	92.2 (0.72)	94.1 (0.46)	93.0 (1.07)	96.0 (1.26)	91.1 (1.74)	91.6 (0.83)						

† Not applicable.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-7. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015

(Standard errors in parentheses)																
State	2013															
	Total	Race/ethnicity								Pacific Islander	American Indian/ Alaska Native	Two or more races				
		White	Black	Hispanic	Asian											
Nation (public)	93.4	(0.30)	93.4	(0.35)	92.7	(0.50)	93.3	(0.53)	95.5	(0.51)	96.8	(1.09)	93.6	(1.28)	92.8	(0.67)
Alabama	99.4	(0.51)	99.0	(0.84)	100.0 ¹	(†)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Alaska	90.8	(1.12)	92.1	(1.32)	95.8	(2.23)	92.3	(2.07)	98.3	(1.11)	94.0	(3.10)	82.4	(2.87)	95.5	(1.84)
Arizona	86.8	(1.88)	90.1	(2.02)	88.6	(3.70)	84.7	(2.78)	80.2	(6.13)	‡	(†)	80.8	(9.40)	‡	(†)
Arkansas	96.0	(1.20)	97.3	(1.08)	93.5	(2.69)	94.6	(2.22)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
California	97.2	(0.89)	97.8	(1.09)	97.7	(1.13)	96.6	(1.16)	98.4	(0.98)	‡	(†)	‡	(†)	97.5	(2.09)
Colorado	93.0	(1.50)	93.2	(1.89)	96.0	(1.73)	91.0	(2.51)	97.9	(1.46)	‡	(†)	‡	(†)	98.3	(1.35)
Connecticut	96.9	(1.07)	97.8	(0.81)	93.5	(3.99)	96.6	(1.67)	92.8	(4.13)	‡	(†)	‡	(†)	‡	(†)
Delaware	94.2	(0.93)	96.0	(0.83)	91.0	(1.86)	94.0	(1.07)	97.8	(1.67)	‡	(†)	‡	(†)	‡	(†)
District of Columbia	71.7	(0.72)	94.4	(1.51)	67.5	(0.95)	74.9	(2.20)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	95.5	(0.91)	96.1	(0.97)	93.6	(2.15)	95.7	(0.83)	98.4	(1.60)	‡	(†)	‡	(†)	96.1	(1.67)
Georgia	99.1	(0.40)	99.1	(0.49)	99.0	(0.40)	99.8	(0.23)	97.3	(1.61)	‡	(†)	‡	(†)	98.1	(1.82)
Hawaii	98.1	(0.63)	97.4	(1.14)	97.3	(2.10)	98.3	(1.08)	99.1	(0.46)	97.3	(1.09)	‡	(†)	98.3	(1.06)
Idaho	93.2	(1.28)	93.4	(1.42)	‡	(†)	92.5	(1.94)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Illinois	98.1	(0.50)	99.5	(0.21)	96.2	(1.59)	96.3	(1.34)	100.0 ¹	(†)	‡	(†)	‡	(†)	99.3	(0.49)
Indiana	87.7	(1.51)	88.8	(1.48)	81.7	(5.53)	85.1	(3.03)	‡	(†)	‡	(†)	‡	(†)	87.0	(3.12)
Iowa	91.0	(1.64)	91.2	(1.66)	87.5	(5.35)	89.8	(3.47)	92.9	(3.90)	‡	(†)	‡	(†)	90.7	(4.47)
Kansas	92.8	(1.21)	94.0	(1.10)	90.2	(3.37)	89.9	(2.36)	98.1	(1.33)	‡	(†)	‡	(†)	85.8	(4.49)
Kentucky	92.9	(1.33)	92.8	(1.50)	92.3	(1.74)	94.3	(2.25)	88.4	(3.13)	‡	(†)	‡	(†)	96.0	(1.69)
Louisiana	92.8	(1.64)	93.2	(1.98)	92.3	(1.83)	91.9	(3.01)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maine	95.8	(0.67)	95.7	(0.72)	95.4	(2.63)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maryland	96.6	(0.80)	98.7	(0.86)	94.3	(1.28)	95.8	(2.07)	96.1	(2.17)	‡	(†)	‡	(†)	97.6	(1.31)
Massachusetts	92.5	(1.77)	92.1	(2.11)	94.3	(2.02)	94.2	(1.91)	91.2	(3.76)	‡	(†)	‡	(†)	89.4	(5.30)
Michigan	86.7	(1.83)	85.5	(2.38)	89.2	(2.81)	85.2	(3.16)	96.3	(2.42)	‡	(†)	‡	(†)	95.5	(2.59)
Minnesota	96.1	(0.89)	97.0	(0.77)	92.1	(3.49)	94.5	(1.89)	97.0	(1.65)	‡	(†)	‡	(†)	89.4	(8.51)
Mississippi	90.0	(1.87)	92.6	(2.02)	87.8	(2.76)	89.1	(4.23)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Missouri	95.0	(1.03)	96.0	(0.97)	93.3	(1.92)	89.0	(3.29)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Montana	97.7	(0.53)	97.8	(0.51)	‡	(†)	96.4	(1.64)	‡	(†)	‡	(†)	97.9	(1.61)	91.6	(3.28)
Nebraska	99.6	(0.30)	99.4	(0.42)	100.0 ¹	(†)	100.0 ¹	(†)	100.0 ¹	(†)	‡	(†)	‡	(†)	100.0 ¹	(†)
Nevada	96.4	(0.81)	96.8	(0.93)	96.0	(1.44)	95.9	(1.06)	96.6	(1.85)	‡	(†)	‡	(†)	97.4	(1.20)
New Hampshire	97.6	(0.63)	97.5	(0.68)	‡	(†)	96.3	(2.37)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
New Jersey	97.7	(0.70)	98.4	(0.86)	96.5	(1.70)	96.1	(1.81)	99.0	(0.74)	‡	(†)	‡	(†)	‡	(†)
New Mexico	94.5	(0.86)	95.9	(1.27)	88.1	(5.06)	95.1	(0.98)	‡	(†)	‡	(†)	87.3	(3.08)	‡	(†)
New York	93.1	(1.05)	96.3	(1.11)	89.4	(2.66)	90.1	(1.82)	92.2	(2.13)	‡	(†)	‡	(†)	‡	(†)
North Carolina	95.3	(1.33)	96.5	(1.38)	93.2	(2.07)	96.2	(1.19)	90.1	(3.87)	‡	(†)	98.7	(1.42)	93.4	(2.04)
North Dakota	84.9	(0.45)	85.1	(0.48)	81.2	(3.37)	85.4	(4.10)	‡	(†)	‡	(†)	84.9	(1.71)	‡	(†)
Ohio	66.4	(3.65)	64.1	(4.25)	77.8	(5.05)	60.3	(5.68)	58.4	(7.41)	‡	(†)	‡	(†)	67.8	(5.35)
Oklahoma	97.0	(1.11)	97.1	(1.14)	96.4	(1.86)	96.0	(1.81)	98.1	(1.84)	‡	(†)	98.6	(0.87)	95.0	(3.49)
Oregon	94.5	(1.37)	94.4	(1.56)	99.1	(0.91)	93.5	(2.24)	96.5	(2.15)	‡	(†)	‡	(†)	95.5	(1.81)

See notes at end of table.

TABLE A-7. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)																
2013																
State	Race/ethnicity															
	Total	White		Black		Hispanic		Asian		Pacific Islander	American Indian/Alaska Native		Two or more races			
Pennsylvania	94.7	(1.29)	95.2	(1.55)	92.4	(1.93)	94.8	(2.11)	96.9	(2.13)	‡	(†)	‡	(†)	93.6	(4.14)
Rhode Island	97.0	(0.56)	96.8	(0.65)	97.5	(1.25)	97.6	(0.85)	98.0	(1.37)	‡	(†)	‡	(†)	94.3	(2.87)
South Carolina	92.7	(1.55)	93.1	(1.74)	92.1	(2.28)	92.5	(2.88)	‡	(†)	‡	(†)	‡	(†)	92.8	(3.09)
South Dakota	90.5	(0.78)	90.5	(0.90)	87.9	(3.83)	90.6	(2.59)	‡	(†)	‡	(†)	91.3	(1.64)	‡	(†)
Tennessee	98.0	(0.76)	98.0	(0.93)	98.8	(0.70)	95.1	(1.92)	99.0	(0.93)	‡	(†)	‡	(†)	‡	(†)
Texas	92.0	(1.45)	93.6	(1.64)	91.5	(2.34)	90.7	(1.82)	97.0	(1.60)	‡	(†)	‡	(†)	95.3	(2.85)
Utah	93.7	(1.28)	93.6	(1.33)	‡	(†)	94.0	(2.21)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Vermont	94.9	(0.28)	94.7	(0.33)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	97.1	(1.99)
Virginia	93.6	(1.23)	95.1	(1.43)	94.2	(1.44)	87.2	(2.25)	90.3	(3.37)	‡	(†)	‡	(†)	95.8	(1.75)
Washington	93.2	(1.65)	94.7	(1.43)	89.0	(4.80)	88.5	(4.59)	94.7	(2.39)	‡	(†)	‡	(†)	95.3	(2.11)
West Virginia	89.9	(1.29)	90.3	(1.28)	82.5	(4.18)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Wisconsin	88.6	(1.88)	88.8	(2.10)	89.6	(2.06)	84.2	(3.58)	92.6	(2.38)	‡	(†)	92.6	(4.48)	‡	(†)
Wyoming	97.0	(0.24)	97.7	(0.25)	‡	(†)	95.0	(1.01)	‡	(†)	‡	(†)	92.6	(1.83)	‡	(†)
Department of Defense Dependents Schools	94.7	(0.26)	94.3	(0.57)	93.9	(0.97)	95.2	(0.98)	97.0	(1.29)	‡	(†)	‡	(†)	94.4	(1.44)
2015																
State	Race/ethnicity															
	Total	White		Black		Hispanic		Asian		Pacific Islander	American Indian/Alaska Native		Two or more races			
Nation (public)	91.9	(0.32)	92.2	(0.34)	89.9	(0.72)	92.0	(0.65)	93.9	(0.88)	95.9	(1.67)	91.1	(1.37)	91.9	(0.79)
Alabama	99.6	(0.36)	99.7	(0.31)	100.0 ¹	(†)	96.5	(3.07)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Alaska	91.9	(1.30)	92.9	(1.57)	94.0	(2.44)	93.7	(1.68)	94.6	(3.28)	‡	(†)	85.7	(3.95)	95.7	(2.32)
Arizona	88.1	(1.52)	88.6	(1.97)	87.2	(3.64)	88.4	(2.08)	‡	(†)	‡	(†)	82.0	(5.93)	‡	(†)
Arkansas	97.1	(0.97)	98.4	(0.73)	92.5	(2.21)	97.0	(1.41)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
California	94.6	(1.34)	97.4	(1.01)	93.9	(2.23)	92.9	(1.95)	98.2	(0.87)	‡	(†)	‡	(†)	93.8	(5.37)
Colorado	90.3	(2.17)	90.4	(2.49)	88.6	(5.68)	90.7	(2.15)	‡	(†)	‡	(†)	‡	(†)	90.7	(3.31)
Connecticut	96.7	(1.06)	97.4	(0.96)	89.9	(5.19)	98.3	(0.70)	99.3	(0.80)	‡	(†)	‡	(†)	‡	(†)
Delaware	94.7	(0.62)	96.2	(0.69)	92.5	(1.08)	92.7	(1.56)	99.0	(1.05)	‡	(†)	‡	(†)	98.8	(1.23)
District of Columbia	63.6	(0.59)	82.8	(2.35)	58.8	(0.86)	66.5	(2.30)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	93.0	(1.55)	94.5	(1.24)	88.7	(3.06)	93.4	(2.10)	96.3	(2.35)	‡	(†)	‡	(†)	92.4	(3.68)
Georgia	97.8	(0.63)	98.4	(0.43)	97.3	(1.11)	97.8	(1.13)	97.6	(2.38)	‡	(†)	‡	(†)	96.6	(2.19)
Hawaii	99.0	(0.39)	99.7	(0.28)	‡	(†)	97.6	(1.51)	99.4	(0.33)	98.7	(0.55)	‡	(†)	98.6	(1.12)
Idaho	89.8	(1.34)	90.9	(1.43)	‡	(†)	85.3	(2.08)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Illinois	97.5	(0.72)	99.1	(0.54)	93.6	(2.21)	97.2	(1.02)	97.0	(2.07)	‡	(†)	‡	(†)	98.4	(1.54)
Indiana	81.8	(2.31)	82.3	(2.33)	79.6	(4.84)	81.9	(4.16)	‡	(†)	‡	(†)	‡	(†)	85.0	(4.97)
Iowa	91.0	(1.75)	90.2	(1.87)	91.5	(3.42)	96.0	(1.53)	93.2	(4.00)	‡	(†)	‡	(†)	91.2	(5.29)
Kansas	95.2	(1.14)	96.6	(0.95)	86.0	(5.45)	93.4	(1.80)	98.5	(1.44)	‡	(†)	‡	(†)	93.0	(2.84)
Kentucky	92.6	(1.72)	93.0	(1.89)	89.3	(2.46)	95.3	(1.93)	80.7	(7.21)	‡	(†)	‡	(†)	93.5	(3.55)
Louisiana	91.1	(2.17)	94.7	(1.34)	87.0	(3.77)	88.3	(3.90)	‡	(†)	‡	(†)	‡	(†)	‡	(†)

See notes at end of table.

TABLE A-7. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)														
2015														
State	Total		Race/ethnicity											
			White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Maine	94.2	(0.85)	94.3	(0.90)	91.2	(2.49)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maryland	94.1	(1.42)	97.0	(1.12)	89.0	(2.70)	95.3	(2.28)	98.1	(1.17)	‡	(†)	95.7	(2.27)
Massachusetts	93.3	(1.29)	92.3	(1.76)	91.6	(2.21)	96.5	(1.03)	95.4	(1.68)	‡	(†)	92.6	(3.22)
Michigan	85.1	(2.08)	84.6	(2.43)	84.9	(5.03)	92.2	(2.97)	93.0	(3.23)	‡	(†)	‡	(†)
Minnesota	94.7	(1.22)	94.9	(1.31)	92.8	(2.34)	93.4	(2.74)	94.9	(2.43)	‡	(†)	97.1	(3.01)
Mississippi	91.1	(2.08)	93.2	(1.94)	88.9	(2.93)	91.7	(2.86)	‡	(†)	‡	(†)	‡	(†)
Missouri	91.5	(1.63)	92.7	(1.52)	86.5	(4.37)	85.6	(6.71)	‡	(†)	‡	(†)	98.5	(1.53)
Montana	97.9	(0.45)	97.7	(0.55)	‡	(†)	98.1	(1.29)	‡	(†)	‡	(†)	99.0	(0.79)
Nebraska	99.3	(0.41)	99.3	(0.42)	100.0 ¹	(†)	99.0	(0.69)	‡	(†)	‡	(†)	98.9	(1.08)
Nevada	90.1	(1.47)	94.0	(1.25)	79.2	(3.53)	89.3	(2.21)	90.3	(3.24)	‡	(†)	92.9	(3.16)
New Hampshire	96.8	(0.78)	97.0	(0.76)	‡	(†)	93.7	(3.44)	98.0	(1.39)	‡	(†)	‡	(†)
New Jersey	98.9	(0.54)	99.5	(0.36)	98.9	(0.77)	97.8	(1.33)	98.1	(1.79)	‡	(†)	‡	(†)
New Mexico	92.5	(1.17)	89.6	(2.16)	‡	(†)	93.1	(1.23)	‡	(†)	‡	(†)	96.0	(1.99)
New York	93.6	(1.43)	97.1	(1.11)	90.0	(3.22)	89.2	(3.59)	91.3	(2.93)	‡	(†)	‡	(†)
North Carolina	96.5	(0.74)	97.1	(0.81)	95.7	(1.17)	96.1	(0.96)	98.7	(0.75)	‡	(†)	91.3	(5.83)
North Dakota	90.8	(0.40)	90.5	(0.44)	96.4	(1.96)	90.1	(2.43)	‡	(†)	‡	(†)	88.8	(1.98)
Ohio	60.6	(3.35)	59.3	(3.79)	68.1	(6.19)	57.3	(5.12)	‡	(†)	‡	(†)	62.9	(5.21)
Oklahoma	96.2	(1.05)	96.5	(1.05)	89.8	(5.88)	97.1	(1.22)	‡	(†)	‡	(†)	98.3	(0.99)
Oregon	93.0	(1.49)	93.4	(1.75)	95.4	(4.26)	90.9	(2.17)	96.7	(1.82)	‡	(†)	92.8	(1.85)
Pennsylvania	91.4	(2.18)	92.7	(2.16)	81.3	(6.67)	92.9	(2.86)	97.7	(1.88)	‡	(†)	92.9	(2.47)
Rhode Island	96.4	(0.58)	96.4	(0.71)	98.8	(0.84)	96.8	(1.06)	‡	(†)	‡	(†)	91.2	(3.07)
South Carolina	92.3	(1.40)	93.6	(1.35)	88.7	(2.87)	95.9	(1.55)	‡	(†)	‡	(†)	95.8	(2.95)
South Dakota	86.0	(1.13)	86.4	(1.18)	87.3	(4.34)	85.8	(3.72)	‡	(†)	‡	(†)	84.6	(3.40)
Tennessee	97.3	(0.90)	97.8	(0.85)	94.8	(2.91)	99.4	(0.56)	‡	(†)	‡	(†)	‡	(†)
Texas	90.3	(1.59)	94.0	(1.87)	86.9	(4.36)	89.6	(1.57)	85.5	(7.61)	‡	(†)	96.5	(3.41)
Utah	92.5	(1.55)	92.9	(1.41)	‡	(†)	90.1	(4.86)	‡	(†)	‡	(†)	‡	(†)
Vermont	92.7	(0.47)	92.8	(0.54)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Virginia	95.0	(1.13)	96.5	(1.00)	93.2	(2.24)	93.0	(1.79)	94.8	(1.93)	‡	(†)	93.2	(2.83)
Washington	88.6	(2.09)	89.1	(2.25)	94.1	(2.84)	86.7	(3.72)	86.8	(2.88)	‡	(†)	86.3	(8.03)
West Virginia	84.9	(1.45)	85.3	(1.49)	73.5	(4.99)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Wisconsin	85.4	(1.92)	85.9	(2.17)	79.1	(5.07)	86.8	(3.97)	87.7	(4.01)	‡	(†)	86.4	(6.03)
Wyoming	96.3	(0.35)	96.4	(0.34)	‡	(†)	95.2	(1.10)	‡	(†)	‡	(†)	100.0 ¹	(†)
Department of Defense Dependents Schools	94.8	(0.35)	95.2	(0.68)	91.9	(1.87)	95.7	(1.09)	92.8	(2.29)	‡	(†)	‡	(†)

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-8. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015

(Standard errors in parentheses)																
2013																
Jurisdiction	Race/ethnicity															
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races								
Nation (public)	93.4	(0.30)	93.4	(0.35)	92.7	(0.50)	93.3	(0.53)	95.5	(0.51)	96.8	(1.09)	93.6	(1.28)	92.8	(0.67)
Large city	92.4	(0.57)	94.1	(0.99)	89.7	(0.95)	92.9	(0.65)	94.5	(1.14)	99.4	(0.34)	94.6	(1.83)	90.1	(1.93)
Albuquerque	96.7	(0.96)	96.5	(1.26)	‡	(†)	96.7	(1.17)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Atlanta	94.3	(0.36)	97.4	(0.11)	92.8	(0.51)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Austin	96.0	(0.66)	98.9	(0.54)	97.5	(1.72)	94.4	(0.83)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Baltimore City	90.3	(1.69)	95.9	(1.92)	89.2	(1.94)	95.6	(3.24)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Boston	94.5	(0.32)	89.7	(1.41)	95.7	(0.67)	94.9	(0.57)	95.0	(1.19)	‡	(†)	‡	(†)	‡	(†)
Charlotte	94.2	(1.21)	96.0	(1.33)	94.3	(1.48)	92.3	(2.28)	91.9	(3.41)	‡	(†)	‡	(†)	89.2	(4.29)
Chicago	94.2	(1.73)	97.0	(1.98)	91.1	(3.56)	95.5	(1.68)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
Cleveland	64.6	(0.72)	67.8	(3.08)	66.2	(1.06)	56.6	(3.24)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Dallas	86.2	(2.44)	‡	(†)	77.6	(5.00)	88.6	(3.04)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Detroit	84.0	(2.92)	‡	(†)	82.8	(3.10)	90.4	(3.09)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
District of Columbia (DCPS)	83.1	(0.72)	98.1	(1.09)	80.0	(1.07)	80.9	(2.12)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Fresno	98.2	(0.85)	100.0 ¹	(†)	98.3	(1.20)	98.0	(1.09)	96.7	(1.57)	‡	(†)	‡	(†)	‡	(†)
Hillsborough County (FL)	98.6	(0.75)	98.2	(1.45)	98.2	(1.14)	99.1	(0.62)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Houston	86.9	(2.40)	96.3	(1.95)	78.6	(6.07)	88.1	(2.25)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Jefferson County (KY)	91.8	(1.55)	93.3	(1.50)	90.5	(2.12)	91.1	(3.30)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Los Angeles	97.6	(1.04)	97.5	(2.65)	94.8	(3.86)	98.2	(0.74)	96.8	(1.84)	‡	(†)	‡	(†)	‡	(†)
Miami-Dade	94.6	(1.65)	93.2	(4.83)	88.3	(4.75)	96.8	(1.12)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Milwaukee	88.3	(1.92)	91.7	(2.03)	87.6	(2.38)	86.1	(3.73)	95.8	(4.15)	‡	(†)	‡	(†)	‡	(†)
New York City	90.8	(1.61)	91.6	(3.68)	94.0	(1.81)	89.8	(1.90)	88.6	(3.08)	‡	(†)	‡	(†)	‡	(†)
Philadelphia	95.1	(1.50)	98.1	(1.45)	92.7	(2.48)	97.3	(1.29)	98.8	(1.49)	‡	(†)	‡	(†)	‡	(†)
San Diego	98.0	(1.16)	99.7	(0.34)	99.1	(1.05)	96.4	(2.17)	99.3	(0.75)	‡	(†)	‡	(†)	100.0 ¹	(†)
Duval County (FL)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)

See notes at end of table.

TABLE A-8. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)																
Jurisdiction	2015															
	Race/ethnicity															
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races								
Nation (public)	91.9	(0.32)	92.2	(0.34)	89.9	(0.72)	92.0	(0.65)	93.9	(0.88)	95.9	(1.67)	91.1	(1.37)	91.9	(0.79)
Large city	88.3	(1.07)	90.8	(1.30)	82.2	(2.09)	89.3	(1.26)	92.3	(1.70)	91.5	(6.24)	92.6	(2.83)	92.9	(1.45)
Albuquerque	92.7	(1.34)	96.3	(1.62)	‡	(†)	90.8	(1.83)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Atlanta	95.7	(1.19)	96.3	(1.49)	95.6	(1.42)	94.8	(2.77)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Austin	94.7	(1.55)	96.0	(2.66)	98.8	(1.28)	93.5	(2.21)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Baltimore City	79.4	(4.00)	82.3	(10.05)	78.2	(4.06)	86.5	(7.99)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Boston	90.8	(1.24)	96.3	(1.69)	87.9	(2.15)	90.8	(1.98)	92.7	(3.16)	‡	(†)	‡	(†)	‡	(†)
Charlotte	93.7	(1.58)	95.5	(1.63)	93.3	(1.92)	92.8	(2.29)	93.9	(3.57)	‡	(†)	‡	(†)	‡	(†)
Chicago	94.1	(1.60)	99.0	(0.69)	91.3	(2.90)	94.5	(2.32)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
Cleveland	66.7	(1.06)	67.0	(3.68)	63.8	(1.61)	75.5	(3.35)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Dallas	82.3	(2.64)	97.5	(2.00)	89.3	(4.03)	78.6	(3.21)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Detroit	82.8	(2.62)	‡	(†)	78.7	(3.21)	96.2	(3.24)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
District of Columbia (DCPS)	77.7	(0.67)	86.3	(2.07)	76.6	(0.91)	71.6	(2.30)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Fresno	92.7	(1.47)	94.8	(2.39)	89.4	(2.83)	92.4	(1.64)	94.3	(2.19)	‡	(†)	‡	(†)	‡	(†)
Hillsborough County (FL)	95.7	(2.14)	95.5	(2.88)	93.7	(5.12)	96.5	(1.65)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Houston	88.2	(2.64)	94.0	(3.05)	88.2	(4.45)	86.7	(2.59)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Jefferson County (KY)	91.9	(2.43)	92.7	(2.54)	89.4	(3.11)	94.8	(2.85)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Los Angeles	96.3	(1.19)	95.6	(3.27)	97.3	(2.18)	96.4	(1.36)	97.4	(1.72)	‡	(†)	‡	(†)	‡	(†)
Miami-Dade	97.1	(1.20)	92.1	(5.79)	95.6	(2.28)	98.0	(0.80)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Milwaukee	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)
New York City	89.3	(2.03)	89.1	(3.96)	87.5	(5.11)	89.4	(1.82)	90.6	(3.96)	‡	(†)	‡	(†)	‡	(†)
Philadelphia	95.2	(1.80)	90.2	(5.15)	96.2	(1.69)	95.5	(2.32)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
San Diego	89.6	(2.95)	98.6	(0.97)	85.8	(4.94)	85.5	(5.21)	88.8	(4.41)	‡	(†)	‡	(†)	94.2	(2.57)
Duval County (FL)	95.9	(1.63)	95.6	(2.08)	96.2	(2.20)	95.7	(2.50)	‡	(†)	‡	(†)	‡	(†)	‡	(†)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)." "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-9. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)						
School characteristic	2013			2015		
	Total	Disability status		Total	Disability status	
		With a disability	Without a disability		With a disability	Without a disability
Nation (public)	93.4 (0.30)	93.0 (0.45)	93.4 (0.30)	91.9 (0.32)	91.9 (0.51)	91.9 (0.33)
Location						
City	93.5 (0.36)	93.5 (0.46)	93.5 (0.39)	90.1 (0.71)	88.3 (1.14)	90.3 (0.70)
Suburban	94.2 (0.46)	93.1 (0.93)	94.4 (0.45)	93.0 (0.43)	94.1 (0.63)	92.8 (0.47)
Town	90.8 (1.07)	89.9 (1.53)	90.9 (1.04)	91.9 (0.87)	91.1 (1.09)	92.0 (0.89)
Rural	93.2 (0.69)	93.6 (0.83)	93.1 (0.71)	92.4 (0.59)	92.8 (0.65)	92.3 (0.63)
Minority enrollment						
75 percent or more	93.2 (0.57)	93.0 (0.73)	93.2 (0.60)	90.4 (0.81)	89.9 (1.11)	90.4 (0.85)
Less than 75 percent	93.4 (0.34)	92.9 (0.54)	93.5 (0.34)	92.5 (0.33)	92.6 (0.44)	92.5 (0.34)

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-10. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015

(Standard errors in parentheses)						
State	2013			2015		
	Total	Disability status		Total	Disability status	
		With a disability	Without a disability		With a disability	Without a disability
Nation (public)	93.4 (0.30)	93.0 (0.45)	93.4 (0.30)	91.9 (0.32)	91.9 (0.51)	91.9 (0.33)
Alabama	99.4 (0.51)	99.4 (0.61)	99.4 (0.50)	99.6 (0.36)	100.0 ¹ (†)	99.6 (0.40)
Alaska	90.8 (1.12)	92.2 (1.99)	90.5 (1.16)	91.9 (1.30)	91.0 (2.46)	92.0 (1.32)
Arizona	86.8 (1.88)	84.6 (3.42)	87.1 (1.89)	88.1 (1.52)	88.9 (2.41)	88.1 (1.57)
Arkansas	96.0 (1.20)	94.5 (1.77)	96.2 (1.16)	97.1 (0.97)	98.1 (1.11)	97.0 (1.02)
California	97.2 (0.89)	95.7 (2.59)	97.4 (0.84)	94.6 (1.34)	93.3 (2.43)	94.8 (1.38)
Colorado	93.0 (1.50)	96.0 (1.27)	92.7 (1.59)	90.3 (2.17)	92.5 (2.20)	90.1 (2.25)
Connecticut	96.9 (1.07)	96.9 (1.38)	96.9 (1.12)	96.7 (1.06)	97.0 (1.35)	96.7 (1.09)
Delaware	94.2 (0.93)	92.1 (1.50)	94.5 (0.94)	94.7 (0.62)	95.8 (0.99)	94.5 (0.65)
District of Columbia	71.7 (0.72)	67.9 (2.70)	72.4 (0.69)	63.6 (0.59)	65.4 (3.35)	63.3 (0.65)
Florida	95.5 (0.91)	95.6 (1.60)	95.5 (0.93)	93.0 (1.55)	95.2 (1.85)	92.5 (1.67)
Georgia	99.1 (0.40)	98.4 (1.06)	99.2 (0.36)	97.8 (0.63)	96.6 (1.41)	98.0 (0.64)
Hawaii	98.1 (0.63)	98.7 (0.71)	98.0 (0.67)	99.0 (0.39)	97.8 (0.93)	99.1 (0.42)
Idaho	93.2 (1.28)	92.5 (1.92)	93.3 (1.31)	89.8 (1.34)	87.0 (3.13)	90.1 (1.29)
Illinois	98.1 (0.50)	98.2 (0.72)	98.1 (0.52)	97.5 (0.72)	98.0 (0.88)	97.4 (0.80)
Indiana	87.7 (1.51)	85.9 (2.55)	88.0 (1.53)	81.8 (2.31)	81.9 (3.03)	81.7 (2.42)
Iowa	91.0 (1.64)	89.5 (2.11)	91.2 (1.68)	91.0 (1.75)	92.6 (1.86)	90.7 (1.83)
Kansas	92.8 (1.21)	89.8 (2.16)	93.3 (1.21)	95.2 (1.14)	94.6 (1.43)	95.3 (1.15)
Kentucky	92.9 (1.33)	93.2 (1.72)	92.8 (1.39)	92.6 (1.72)	93.5 (1.66)	92.4 (1.80)
Louisiana	92.8 (1.64)	93.7 (2.26)	92.6 (1.63)	91.1 (2.17)	92.2 (2.36)	90.9 (2.28)
Maine	95.8 (0.67)	94.4 (1.18)	96.2 (0.66)	94.2 (0.85)	95.5 (1.07)	93.9 (0.92)

See notes at end of table.

TABLE A-10. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015—Continued

(Standard errors in parentheses)							
State	2013				2015		
	Total	Disability status		Total	Disability status		
		With a disability	Without a disability		With a disability	Without a disability	
Maryland	96.6 (0.80)	96.9 (1.02)	96.5 (0.86)	94.1 (1.42)	89.1 (2.85)	94.8 (1.30)	
Massachusetts	92.5 (1.77)	93.9 (1.75)	92.2 (1.84)	93.3 (1.29)	95.3 (1.30)	92.9 (1.40)	
Michigan	86.7 (1.83)	88.8 (2.40)	86.5 (1.87)	85.1 (2.08)	89.5 (2.00)	84.5 (2.16)	
Minnesota	96.1 (0.89)	94.1 (1.50)	96.5 (0.84)	94.7 (1.22)	95.0 (1.60)	94.6 (1.25)	
Mississippi	90.0 (1.87)	87.7 (2.31)	90.2 (1.90)	91.1 (2.08)	91.5 (2.17)	91.1 (2.16)	
Missouri	95.0 (1.03)	95.8 (1.59)	94.9 (1.01)	91.5 (1.63)	90.2 (2.27)	91.7 (1.67)	
Montana	97.7 (0.53)	97.3 (1.23)	97.7 (0.53)	97.9 (0.45)	97.4 (0.92)	98.0 (0.46)	
Nebraska	99.6 (0.30)	99.7 (0.35)	99.5 (0.33)	99.3 (0.41)	99.0 (0.69)	99.4 (0.38)	
Nevada	96.4 (0.81)	97.0 (1.03)	96.4 (0.84)	90.1 (1.47)	91.0 (2.26)	89.9 (1.48)	
New Hampshire	97.6 (0.63)	97.7 (0.85)	97.6 (0.64)	96.8 (0.78)	95.5 (1.78)	97.1 (0.79)	
New Jersey	97.7 (0.70)	96.6 (1.23)	97.9 (0.76)	98.9 (0.54)	98.5 (0.88)	99.0 (0.52)	
New Mexico	94.5 (0.86)	93.0 (1.95)	94.7 (0.83)	92.5 (1.17)	90.6 (1.95)	92.7 (1.20)	
New York	93.1 (1.05)	92.9 (1.41)	93.2 (1.15)	93.6 (1.43)	91.1 (1.70)	94.1 (1.53)	
North Carolina	95.3 (1.33)	96.0 (1.36)	95.2 (1.44)	96.5 (0.74)	96.1 (0.90)	96.5 (0.82)	
North Dakota	84.9 (0.45)	83.6 (1.90)	85.1 (0.49)	90.8 (0.40)	88.6 (2.04)	91.0 (0.49)	
Ohio	66.4 (3.65)	71.2 (4.22)	65.6 (3.71)	60.6 (3.35)	61.9 (3.99)	60.4 (3.44)	
Oklahoma	97.0 (1.11)	98.2 (0.97)	96.8 (1.19)	96.2 (1.05)	94.6 (1.89)	96.6 (0.98)	
Oregon	94.5 (1.37)	95.1 (1.58)	94.4 (1.40)	93.0 (1.49)	92.9 (2.25)	93.0 (1.53)	
Pennsylvania	94.7 (1.29)	94.7 (1.81)	94.7 (1.32)	91.4 (2.18)	91.7 (2.16)	91.4 (2.33)	
Rhode Island	97.0 (0.56)	97.2 (1.06)	96.9 (0.57)	96.4 (0.58)	98.9 (0.62)	96.0 (0.63)	
South Carolina	92.7 (1.55)	91.2 (2.13)	92.9 (1.53)	92.3 (1.40)	89.6 (1.92)	92.8 (1.43)	
South Dakota	90.5 (0.78)	87.8 (1.81)	91.0 (0.78)	86.0 (1.13)	85.0 (1.93)	86.1 (1.20)	
Tennessee	98.0 (0.76)	97.6 (1.04)	98.0 (0.80)	97.3 (0.90)	97.7 (1.17)	97.2 (0.94)	
Texas	92.0 (1.45)	89.9 (2.62)	92.3 (1.41)	90.3 (1.59)	91.7 (2.32)	90.1 (1.63)	
Utah	93.7 (1.28)	95.9 (1.42)	93.4 (1.36)	92.5 (1.55)	96.2 (1.48)	92.0 (1.64)	
Vermont	94.9 (0.28)	94.6 (1.16)	94.9 (0.34)	92.7 (0.47)	90.4 (1.89)	93.1 (0.53)	
Virginia	93.6 (1.23)	92.6 (2.35)	93.7 (1.30)	95.0 (1.13)	93.0 (2.68)	95.2 (1.08)	
Washington	93.2 (1.65)	93.7 (1.65)	93.2 (1.74)	88.6 (2.09)	85.0 (3.09)	89.1 (2.09)	
West Virginia	89.9 (1.29)	86.0 (2.27)	90.7 (1.28)	84.9 (1.45)	84.1 (1.91)	85.1 (1.58)	
Wisconsin	88.6 (1.88)	89.6 (2.37)	88.5 (1.94)	85.4 (1.92)	87.4 (2.84)	85.1 (1.98)	
Wyoming	97.0 (0.83)	96.7 (0.83)	97.1 (0.26)	96.3 (0.35)	96.7 (0.97)	96.2 (0.35)	
Department of Defense Dependents Schools	94.7 (0.26)	97.0 (0.89)	94.4 (0.29)	94.8 (0.35)	96.2 (1.33)	94.6 (0.37)	

† Not applicable.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-11. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)												
Jurisdiction	2013					2015						
	Total	Disability status			Total	Disability status						
		With a disability	Without a disability	With a disability		Without a disability						
Nation (public)	93.4	(0.30)	92.9	(0.45)	93.4	(0.30)	91.9	(0.32)	91.9	(0.51)	91.9	(0.33)
Large city	92.4	(0.57)	91.8	(0.80)	92.5	(0.59)	88.3	(1.07)	85.1	(1.66)	88.7	(1.07)
Albuquerque	96.7	(0.96)	95.5	(1.81)	96.9	(0.92)	92.7	(1.34)	88.8	(3.22)	93.4	(1.42)
Atlanta	94.3	(0.36)	96.3	(1.59)	94.1	(0.38)	95.7	(1.19)	90.6	(3.28)	96.2	(1.19)
Austin	96.0	(0.66)	97.5	(1.07)	95.8	(0.78)	94.7	(1.55)	96.9	(1.57)	94.3	(1.66)
Baltimore City	90.3	(1.69)	89.0	(2.34)	90.6	(1.84)	79.4	(4.00)	70.3	(6.48)	81.1	(3.91)
Boston	94.5	(0.32)	94.6	(1.12)	94.4	(0.39)	90.8	(1.24)	87.1	(3.48)	91.7	(1.16)
Charlotte	94.2	(1.21)	93.0	(2.47)	94.3	(1.24)	93.7	(1.58)	88.4	(3.26)	94.3	(1.57)
Chicago	94.2	(1.73)	94.9	(1.63)	94.1	(1.82)	94.1	(1.60)	93.9	(1.72)	94.2	(1.68)
Cleveland	64.6	(0.72)	68.8	(2.79)	63.7	(0.84)	66.7	(1.06)	63.3	(3.50)	67.5	(1.30)
Dallas	86.2	(2.44)	82.5	(3.98)	86.6	(2.47)	82.3	(2.64)	‡	(†)	82.0	(2.71)
Detroit	84.0	(2.92)	79.4	(5.25)	84.7	(2.96)	82.8	(2.62)	83.6	(4.25)	82.6	(2.88)
District of Columbia (DCPS)	83.1	(0.72)	85.2	(2.75)	82.7	(0.81)	77.7	(0.67)	76.5	(4.05)	77.8	(0.74)
Fresno	98.2	(0.85)	97.8	(1.30)	98.2	(0.87)	92.7	(1.47)	93.3	(2.78)	92.6	(1.61)
Hillsborough County (FL)	98.6	(0.75)	97.8	(1.23)	98.8	(0.70)	95.7	(2.14)	95.5	(3.19)	95.8	(2.03)
Houston	86.9	(2.40)	91.1	(3.27)	86.5	(2.44)	88.2	(2.64)	89.6	(3.84)	88.1	(2.68)
Jefferson County (KY)	91.8	(1.55)	92.4	(2.24)	91.7	(1.61)	91.9	(2.43)	92.6	(2.90)	91.7	(2.47)
Los Angeles	97.6	(1.04)	100.0 ¹	(†)	97.4	(1.13)	96.3	(1.19)	91.2	(3.30)	96.9	(1.15)
Miami-Dade	94.6	(1.65)	94.0	(2.48)	94.7	(1.66)	97.1	(1.20)	95.6	(2.75)	97.2	(1.26)
Milwaukee	88.3	(1.92)	85.3	(2.77)	89.0	(1.99)	—	(†)	—	(†)	—	(†)
New York City	90.8	(1.61)	91.3	(2.43)	90.7	(1.76)	89.3	(2.03)	82.6	(3.41)	91.4	(2.17)
Philadelphia	95.1	(1.50)	92.3	(3.59)	95.5	(1.41)	95.2	(1.80)	96.4	(1.77)	95.0	(1.99)
San Diego	98.0	(1.16)	96.3	(2.39)	98.2	(1.20)	89.6	(2.95)	88.8	(4.43)	89.6	(2.97)
Duval County (FL)	—	(†)	—	(†)	—	(†)	95.9	(1.63)	97.4	(1.51)	95.6	(1.75)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-12. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)								
School characteristic	2013					2015		
	Total	English language learner (ELL) status			Total	English language learner (ELL) status		
		ELL	Not ELL	ELL		Not ELL		
Nation (public)	93.4 (0.30)	91.6 (0.82)	93.6 (0.28)	91.9 (0.32)	91.3 (0.80)	92.0 (0.32)		
Location								
City	93.5 (0.36)	91.8 (0.67)	93.9 (0.38)	90.1 (0.71)	88.8 (1.28)	90.3 (0.73)		
Suburban	94.2 (0.46)	92.7 (1.46)	94.4 (0.44)	93.0 (0.43)	92.9 (1.22)	93.0 (0.43)		
Town	90.8 (1.07)	88.7 (2.90)	90.9 (1.02)	91.9 (0.87)	93.3 (1.71)	91.8 (0.89)		
Rural	93.2 (0.69)	89.1 (3.59)	93.4 (0.60)	92.4 (0.59)	95.5 (1.10)	92.2 (0.60)		
Minority enrollment								
75 percent or more	93.2 (0.57)	92.0 (1.07)	93.6 (0.52)	90.4 (0.81)	90.6 (1.25)	90.3 (0.85)		
Less than 75 percent	93.4 (0.34)	90.9 (1.22)	93.6 (0.34)	92.5 (0.33)	92.6 (0.59)	92.5 (0.33)		

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-13. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015

(Standard errors in parentheses)								
State	2013					2015		
	Total	English language learner (ELL) status			Total	English language learner (ELL) status		
		ELL	Not ELL	ELL		Not ELL		
Nation (public)	93.4 (0.30)	91.6 (0.82)	93.6 (0.28)	91.9 (0.32)	91.3 (0.80)	92.0 (0.32)		
Alabama	99.4 (0.51)	100.0 ¹ (†)	99.4 (0.52)	99.6 (0.36)	† (†)	99.6 (0.36)		
Alaska	90.8 (1.12)	82.1 (4.14)	92.2 (1.00)	91.9 (1.30)	94.2 (2.47)	91.5 (1.39)		
Arizona	86.8 (1.88)	87.4 (5.48)	86.8 (1.84)	88.1 (1.52)	86.0 (4.25)	88.4 (1.51)		
Arkansas	96.0 (1.20)	95.1 (2.30)	96.1 (1.22)	97.1 (0.97)	97.9 (1.21)	97.1 (1.00)		
California	97.2 (0.89)	95.7 (1.81)	97.8 (0.81)	94.6 (1.34)	93.3 (1.92)	95.1 (1.27)		
Colorado	93.0 (1.50)	90.7 (3.33)	93.4 (1.55)	90.3 (2.17)	87.2 (3.61)	90.8 (2.14)		
Connecticut	96.9 (1.07)	99.5 (0.59)	96.7 (1.12)	96.7 (1.06)	95.2 (2.37)	96.8 (1.05)		
Delaware	94.2 (0.93)	100.0 ¹ (†)	94.0 (0.96)	94.7 (0.62)	94.1 (2.64)	94.7 (0.63)		
District of Columbia	71.7 (0.72)	74.0 (4.07)	71.6 (0.76)	63.6 (0.59)	59.0 (4.73)	63.9 (0.57)		
Florida	95.5 (0.91)	95.6 (1.14)	95.5 (1.01)	93.0 (1.55)	92.1 (2.81)	93.0 (1.52)		
Georgia	99.1 (0.40)	100.0 ¹ (†)	99.1 (0.42)	97.8 (0.63)	97.5 (1.83)	97.9 (0.61)		
Hawaii	98.1 (0.63)	96.7 (2.41)	98.2 (0.55)	99.0 (0.39)	99.2 (0.74)	99.0 (0.39)		
Idaho	93.2 (1.28)	91.2 (3.61)	93.3 (1.30)	89.8 (1.34)	86.5 (3.31)	89.9 (1.32)		
Illinois	98.1 (0.50)	95.4 (3.68)	98.4 (0.45)	97.5 (0.72)	98.0 (0.81)	97.4 (0.78)		
Indiana	87.7 (1.51)	81.5 (3.78)	88.2 (1.48)	81.8 (2.31)	82.4 (4.17)	81.7 (2.35)		
Iowa	91.0 (1.64)	87.6 (4.82)	91.1 (1.61)	91.0 (1.75)	93.1 (3.70)	90.8 (1.79)		
Kansas	92.8 (1.21)	92.2 (2.79)	92.9 (1.28)	95.2 (1.14)	94.1 (1.90)	95.3 (1.14)		
Kentucky	92.9 (1.33)	96.7 (1.67)	92.8 (1.36)	92.6 (1.72)	88.2 (4.49)	92.7 (1.75)		
Louisiana	92.8 (1.64)	89.2 (6.58)	92.9 (1.60)	91.1 (2.17)	† (†)	91.2 (2.20)		
Maine	95.8 (0.67)	95.2 (2.69)	95.9 (0.67)	94.2 (0.85)	89.5 (2.98)	94.3 (0.89)		

See notes at end of table.

TABLE A-13. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015—Continued

(Standard errors in parentheses)										
State	2013					2015				
	Total	English language learner (ELL) status			Total	English language learner (ELL) status				
		ELL	Not ELL	ELL		Not ELL				
Maryland	96.6 (0.80)	96.8 (2.31)	96.5 (0.82)	94.1 (1.42)	94.6 (3.11)	94.0 (1.36)				
Massachusetts	92.5 (1.77)	92.1 (2.98)	92.6 (1.77)	93.3 (1.29)	97.8 (0.58)	92.8 (1.40)				
Michigan	86.7 (1.83)	84.9 (4.55)	86.9 (1.90)	85.1 (2.08)	97.4 (1.66)	84.5 (2.18)				
Minnesota	96.1 (0.89)	96.4 (1.28)	96.1 (0.94)	94.7 (1.22)	94.0 (2.09)	94.7 (1.25)				
Mississippi	90.0 (1.87)	‡ (†)	90.0 (1.87)	91.1 (2.08)	‡ (†)	91.1 (2.12)				
Missouri	95.0 (1.03)	‡ (†)	95.3 (1.01)	91.5 (1.63)	‡ (†)	91.8 (1.53)				
Montana	97.7 (0.53)	96.9 (2.87)	97.7 (0.52)	97.9 (0.45)	‡ (†)	97.8 (0.47)				
Nebraska	99.6 (0.30)	100.0 ¹ (†)	99.5 (0.32)	99.3 (0.41)	98.7 (1.14)	99.3 (0.39)				
Nevada	96.4 (0.81)	96.1 (1.23)	96.5 (0.81)	90.1 (1.47)	89.0 (2.75)	90.4 (1.39)				
New Hampshire	97.6 (0.63)	92.8 (4.29)	97.7 (0.61)	96.8 (0.78)	96.7 (2.77)	96.8 (0.80)				
New Jersey	97.7 (0.70)	84.5 (8.42)	98.1 (0.62)	98.9 (0.54)	‡ (†)	99.3 (0.41)				
New Mexico	94.5 (0.86)	90.6 (2.25)	95.3 (0.82)	92.5 (1.17)	89.6 (2.48)	93.0 (1.22)				
New York	93.1 (1.05)	88.2 (2.34)	93.5 (1.08)	93.6 (1.43)	89.1 (2.90)	93.9 (1.50)				
North Carolina	95.3 (1.33)	95.1 (1.72)	95.3 (1.34)	96.5 (0.74)	95.3 (1.64)	96.6 (0.72)				
North Dakota	84.9 (0.45)	‡ (†)	85.3 (0.43)	90.8 (0.40)	‡ (†)	90.8 (0.41)				
Ohio	66.4 (3.65)	45.9 (7.08)	67.0 (3.66)	60.6 (3.35)	64.4 (7.40)	60.5 (3.41)				
Oklahoma	97.0 (1.11)	96.1 (2.24)	97.1 (1.08)	96.2 (1.05)	97.8 (1.30)	96.1 (1.10)				
Oregon	94.5 (1.37)	92.9 (2.46)	94.8 (1.38)	93.0 (1.49)	91.1 (2.67)	93.3 (1.60)				
Pennsylvania	94.7 (1.29)	92.8 (4.87)	94.8 (1.29)	91.4 (2.18)	90.3 (4.56)	91.5 (2.21)				
Rhode Island	97.0 (0.56)	98.5 (0.99)	96.9 (0.58)	96.4 (0.58)	99.4 (0.61)	96.2 (0.62)				
South Carolina	92.7 (1.55)	93.4 (2.74)	92.7 (1.60)	92.3 (1.40)	96.1 (1.99)	92.0 (1.42)				
South Dakota	90.5 (0.78)	90.5 (3.59)	90.5 (0.80)	86.0 (1.13)	‡ (†)	86.0 (1.14)				
Tennessee	98.0 (0.76)	93.3 (2.94)	98.2 (0.77)	97.3 (0.90)	100.0 ¹ (†)	97.1 (0.94)				
Texas	92.0 (1.45)	88.1 (2.18)	93.2 (1.42)	90.3 (1.59)	88.2 (2.35)	90.9 (1.75)				
Utah	93.7 (1.28)	95.3 (2.53)	93.6 (1.31)	92.5 (1.55)	88.9 (6.63)	92.6 (1.46)				
Vermont	94.9 (0.28)	‡ (†)	94.9 (0.28)	92.7 (0.47)	‡ (†)	92.6 (0.48)				
Virginia	93.6 (1.23)	82.8 (4.85)	94.4 (1.18)	95.0 (1.13)	87.9 (4.07)	95.5 (1.01)				
Washington	93.2 (1.65)	84.4 (6.35)	94.2 (1.41)	88.6 (2.09)	86.9 (4.42)	88.9 (2.01)				
West Virginia	89.9 (1.29)	‡ (†)	89.8 (1.29)	84.9 (1.45)	‡ (†)	84.8 (1.47)				
Wisconsin	88.6 (1.88)	81.9 (5.14)	89.2 (1.84)	85.4 (1.92)	86.5 (4.46)	85.3 (1.96)				
Wyoming	97.0 (0.24)	88.5 (2.98)	97.2 (0.24)	96.3 (0.35)	95.7 (2.34)	96.3 (0.34)				
Department of Defense Dependents Schools	94.7 (0.26)	94.1 (1.70)	94.7 (0.27)	94.8 (0.35)	97.5 (1.37)	94.6 (0.38)				

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-14. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and jurisdiction: 2013 and 2015

Jurisdiction	(Standard errors in parentheses)							
	2013				2015			
	Total	English language learner (ELL) status		Total	English language learner (ELL) status			
		ELL	Not ELL		ELL	Not ELL		
Nation (public)	93.4 (0.30)	91.6 (0.82)	93.6 (0.28)	91.9 (0.32)	91.3 (0.80)	92.0 (0.32)		
Large city	92.4 (0.57)	91.4 (0.85)	92.7 (0.60)	88.3 (1.07)	87.4 (1.81)	88.5 (1.13)		
Albuquerque	96.7 (0.96)	96.5 (1.70)	96.7 (0.95)	92.7 (1.34)	89.3 (2.99)	93.5 (1.30)		
Atlanta	94.3 (0.36)	‡ (†)	94.1 (0.37)	95.7 (1.19)	‡ (†)	95.7 (1.21)		
Austin	96.0 (0.66)	92.6 (1.39)	97.7 (0.64)	94.7 (1.55)	91.3 (3.18)	96.7 (1.42)		
Baltimore City	90.3 (1.69)	‡ (†)	90.0 (1.76)	79.4 (4.00)	‡ (†)	78.6 (4.13)		
Boston	94.5 (0.32)	94.2 (0.64)	94.6 (0.44)	90.8 (1.24)	90.2 (1.79)	91.1 (1.26)		
Charlotte	94.2 (1.21)	93.1 (2.56)	94.3 (1.24)	93.7 (1.58)	91.2 (3.69)	94.0 (1.52)		
Chicago	94.2 (1.73)	97.7 (1.10)	93.5 (1.94)	94.1 (1.60)	92.7 (3.03)	94.4 (1.61)		
Cleveland	64.6 (0.72)	53.9 (4.58)	65.5 (0.82)	66.7 (1.06)	68.8 (4.49)	66.5 (1.23)		
Dallas	86.2 (2.44)	85.9 (3.86)	86.6 (3.00)	82.3 (2.64)	74.3 (4.19)	90.5 (3.06)		
Detroit	84.0 (2.92)	94.2 (2.72)	81.8 (3.02)	82.8 (2.62)	95.9 (3.56)	79.8 (3.04)		
District of Columbia (DCPS)	83.1 (0.72)	80.8 (4.06)	83.3 (0.83)	77.7 (0.67)	63.9 (5.07)	78.7 (0.66)		
Fresno	98.2 (0.85)	96.9 (1.64)	98.6 (0.62)	92.7 (1.47)	92.5 (2.30)	92.7 (1.65)		
Hillsborough County (FL)	98.6 (0.75)	99.0 (0.97)	98.6 (0.82)	95.7 (2.14)	96.4 (2.07)	95.7 (2.27)		
Houston	86.9 (2.40)	85.4 (2.87)	87.8 (2.83)	88.2 (2.64)	87.9 (2.82)	88.4 (2.92)		
Jefferson County (KY)	91.8 (1.55)	92.7 (3.93)	91.8 (1.54)	91.9 (2.43)	94.1 (4.32)	91.6 (2.55)		
Los Angeles	97.6 (1.04)	99.4 (0.42)	97.0 (1.37)	96.3 (1.19)	96.1 (1.93)	96.4 (1.29)		
Miami-Dade	94.6 (1.65)	96.8 (1.65)	93.9 (1.99)	97.1 (1.20)	98.0 (1.00)	96.8 (1.34)		
Milwaukee	88.3 (1.92)	83.0 (5.56)	89.1 (1.85)	— (†)	— (†)	— (†)		
New York City	90.8 (1.61)	85.4 (2.72)	91.7 (1.76)	89.3 (2.03)	89.2 (3.44)	89.4 (2.17)		
Philadelphia	95.1 (1.50)	95.1 (3.34)	95.1 (1.55)	95.2 (1.80)	97.8 (1.56)	95.0 (1.90)		
San Diego	98.0 (1.16)	95.4 (3.02)	99.3 (0.40)	89.6 (2.95)	85.2 (4.97)	91.9 (2.44)		
Duval County (FL)	— (†)	— (†)	— (†)	95.9 (1.63)	‡ (†)	96.0 (1.55)		

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-15. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)							
School characteristic	2013			2015			
	Total	National School Lunch Program (NSLP) status		Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible		NSLP eligible	Not NSLP eligible	
Nation (public)	93.4 (0.30)	92.6 (0.38)	94.2 (0.28)	91.9 (0.32)	91.0 (0.45)	92.9 (0.34)	
Location							
City	93.5 (0.36)	92.5 (0.45)	95.7 (0.42)	90.1 (0.71)	89.4 (0.81)	91.4 (1.06)	
Suburban	94.2 (0.46)	93.3 (0.69)	94.9 (0.42)	93.0 (0.43)	91.9 (0.77)	93.9 (0.43)	
Town	90.8 (1.07)	91.4 (1.14)	90.1 (1.23)	91.9 (0.87)	91.7 (0.98)	92.2 (0.91)	
Rural	93.2 (0.69)	92.5 (0.96)	93.9 (0.58)	92.4 (0.59)	92.2 (0.67)	92.5 (0.70)	
Minority enrollment							
75 percent or more	93.2 (0.57)	92.6 (0.62)	96.2 (0.52)	90.4 (0.81)	90.1 (0.89)	91.5 (1.14)	
Less than 75 percent	93.4 (0.34)	92.6 (0.49)	94.0 (0.31)	92.5 (0.33)	91.7 (0.41)	93.1 (0.37)	

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-16. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015

(Standard errors in parentheses)							
State	2013			2015			
	Total	National School Lunch Program (NSLP) status		Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible		NSLP eligible	Not NSLP eligible	
Nation (public)	93.4 (0.30)	92.6 (0.38)	94.2 (0.28)	91.9 (0.32)	91.0 (0.45)	92.9 (0.34)	
Alabama	99.4 (0.51)	99.2 (0.77)	99.8 (0.17)	99.6 (0.36)	99.6 (0.41)	99.7 (0.29)	
Alaska	90.8 (1.12)	87.7 (1.62)	93.9 (1.05)	91.9 (1.30)	92.7 (1.76)	91.4 (1.68)	
Arizona	86.8 (1.88)	84.2 (2.68)	90.3 (2.01)	88.1 (1.52)	87.7 (1.87)	91.0 (2.05)	
Arkansas	96.0 (1.20)	96.3 (1.16)	95.5 (1.92)	97.1 (0.97)	96.4 (1.26)	98.7 (0.61)	
California	97.2 (0.89)	96.1 (1.26)	99.0 (0.67)	94.6 (1.34)	93.1 (1.84)	97.0 (1.28)	
Colorado	93.0 (1.50)	93.0 (1.88)	93.0 (1.90)	90.3 (2.17)	91.5 (1.95)	89.1 (3.04)	
Connecticut	96.9 (1.07)	95.6 (2.10)	97.6 (0.72)	96.7 (1.06)	95.5 (1.70)	97.6 (0.85)	
Delaware	94.2 (0.93)	93.0 (1.16)	95.5 (0.98)	94.7 (0.62)	94.1 (0.92)	95.1 (0.67)	
District of Columbia	71.7 (0.72)	67.3 (0.86)	87.5 (1.35)	63.6 (0.59)	59.6 (0.79)	75.7 (1.84)	
Florida	95.5 (0.91)	95.0 (0.94)	96.3 (1.02)	93.0 (1.55)	91.2 (1.94)	95.6 (1.24)	
Georgia	99.1 (0.40)	99.3 (0.33)	98.8 (0.67)	97.8 (0.63)	98.1 (0.71)	96.9 (1.06)	
Hawaii	98.1 (0.63)	97.9 (0.78)	98.3 (0.58)	99.0 (0.39)	99.0 (0.49)	99.1 (0.43)	
Idaho	93.2 (1.28)	93.6 (1.33)	92.9 (1.53)	89.8 (1.34)	88.2 (1.60)	91.5 (1.44)	
Illinois	98.1 (0.50)	97.0 (0.84)	99.3 (0.31)	97.5 (0.72)	96.3 (1.05)	99.0 (0.62)	
Indiana	87.7 (1.51)	84.9 (2.09)	90.8 (1.39)	81.8 (2.31)	80.9 (2.88)	82.3 (2.38)	
Iowa	91.0 (1.64)	89.7 (2.04)	91.8 (1.80)	91.0 (1.75)	91.1 (2.13)	90.8 (1.83)	
Kansas	92.8 (1.21)	91.7 (1.42)	94.1 (1.45)	95.2 (1.14)	92.9 (1.76)	98.1 (0.67)	
Kentucky	92.9 (1.33)	92.6 (1.31)	93.1 (1.53)	92.6 (1.72)	92.9 (1.58)	92.0 (2.31)	
Louisiana	92.8 (1.64)	93.3 (1.67)	91.5 (2.56)	91.1 (2.17)	90.5 (2.65)	92.8 (1.83)	
Maine	95.8 (0.67)	95.8 (0.76)	95.9 (0.81)	94.2 (0.85)	92.8 (1.30)	95.4 (0.78)	

See notes at end of table.

TABLE A-16. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015—Continued

(Standard errors in parentheses)												
State	2013						2015					
	Total	National School Lunch Program (NSLP) status				Total	National School Lunch Program (NSLP) status					
		NSLP eligible	Not NSLP eligible		NSLP eligible		Not NSLP eligible					
Maryland	96.6 (0.80)	94.7 (1.21)	97.9 (0.70)	94.1 (1.42)	90.8 (2.07)	97.0 (1.13)						
Massachusetts	92.5 (1.77)	93.8 (1.57)	91.7 (2.15)	93.3 (1.29)	93.9 (1.21)	92.8 (1.91)						
Michigan	86.7 (1.83)	85.7 (2.16)	87.9 (2.14)	85.1 (2.08)	83.7 (2.53)	86.4 (2.21)						
Minnesota	96.1 (0.89)	94.9 (1.52)	96.8 (0.81)	94.7 (1.22)	93.8 (1.63)	95.2 (1.30)						
Mississippi	90.0 (1.87)	89.2 (2.15)	93.8 (1.52)	91.1 (2.08)	90.1 (2.48)	94.0 (1.83)						
Missouri	95.0 (1.03)	94.7 (1.24)	95.4 (1.11)	91.5 (1.63)	89.7 (2.45)	93.6 (1.46)						
Montana	97.7 (0.53)	97.3 (0.83)	98.0 (0.50)	97.9 (0.45)	98.2 (0.54)	97.6 (0.62)						
Nebraska	99.6 (0.30)	99.9 (0.12)	99.3 (0.52)	99.3 (0.41)	99.1 (0.51)	99.4 (0.35)						
Nevada	96.4 (0.81)	96.3 (0.96)	96.7 (1.05)	90.1 (1.47)	87.4 (2.18)	94.4 (1.08)						
New Hampshire	97.6 (0.63)	97.5 (0.74)	97.6 (0.68)	96.8 (0.78)	96.7 (1.12)	97.5 (0.70)						
New Jersey	97.7 (0.70)	96.7 (1.06)	98.3 (0.81)	98.9 (0.54)	98.2 (0.98)	99.3 (0.50)						
New Mexico	94.5 (0.86)	93.8 (1.02)	96.3 (1.29)	92.5 (1.17)	92.5 (1.36)	93.3 (1.78)						
New York	93.1 (1.05)	91.1 (1.46)	95.2 (1.15)	93.6 (1.43)	91.4 (1.96)	96.1 (1.37)						
North Carolina	95.3 (1.33)	95.2 (1.42)	95.3 (1.48)	96.5 (0.74)	96.1 (0.85)	97.1 (0.99)						
North Dakota	84.9 (0.45)	85.1 (0.93)	84.8 (0.70)	90.8 (0.40)	90.5 (0.96)	90.9 (0.57)						
Ohio	66.4 (3.65)	68.8 (4.22)	64.3 (4.21)	60.6 (3.35)	60.0 (4.00)	60.7 (3.94)						
Oklahoma	97.0 (1.11)	96.6 (1.30)	97.6 (0.96)	96.2 (1.05)	95.4 (1.40)	97.5 (1.04)						
Oregon	94.5 (1.37)	94.7 (1.45)	94.3 (1.44)	93.0 (1.49)	92.9 (1.51)	93.3 (2.10)						
Pennsylvania	94.7 (1.29)	93.6 (1.59)	95.6 (1.34)	91.4 (2.18)	88.5 (3.23)	94.1 (1.90)						
Rhode Island	97.0 (0.56)	97.2 (0.70)	96.7 (0.63)	96.4 (0.58)	96.2 (0.73)	96.5 (0.76)						
South Carolina	92.7 (1.55)	91.8 (1.87)	94.2 (1.42)	92.3 (1.40)	90.8 (1.91)	94.8 (1.42)						
South Dakota	90.5 (0.78)	90.8 (1.11)	90.4 (0.89)	86.0 (1.13)	84.1 (1.44)	87.9 (1.34)						
Tennessee	98.0 (0.76)	97.5 (0.93)	98.7 (0.54)	97.3 (0.90)	96.6 (1.20)	98.1 (0.72)						
Texas	92.0 (1.45)	90.3 (1.85)	94.8 (1.36)	90.3 (1.59)	89.4 (2.19)	91.9 (1.93)						
Utah	93.7 (1.28)	93.2 (1.48)	93.9 (1.44)	92.5 (1.55)	92.7 (2.50)	92.3 (1.57)						
Vermont	94.9 (0.28)	95.1 (0.57)	94.7 (0.48)	92.7 (0.47)	91.4 (0.83)	93.5 (0.65)						
Virginia	93.6 (1.23)	91.7 (1.84)	94.6 (1.23)	95.0 (1.13)	94.3 (1.49)	95.4 (1.16)						
Washington	93.2 (1.65)	89.6 (2.84)	96.4 (1.04)	88.6 (2.09)	88.6 (2.73)	88.6 (2.07)						
West Virginia	89.9 (1.29)	88.5 (1.55)	93.4 (1.57)	84.9 (1.45)	83.6 (1.80)	88.5 (2.12)						
Wisconsin	88.6 (1.88)	88.5 (2.05)	88.7 (2.06)	85.4 (1.92)	86.8 (2.04)	84.1 (2.37)						
Wyoming	97.0 (0.24)	96.5 (0.41)	97.3 (0.29)	96.3 (0.35)	95.7 (0.57)	96.8 (0.44)						
Department of Defense Dependents Schools	94.7 (0.26)	‡ (†)	‡ (†)	94.8 (0.35)	‡ (†)	‡ (†)						

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-17. Percentage of 4th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)												
Jurisdiction	2013						2015					
	Total	National School Lunch Program (NSLP) status				Total	National School Lunch Program (NSLP) status					
		NSLP eligible	Not NSLP eligible		NSLP eligible		Not NSLP eligible					
Nation (public)	93.4	(0.30)	92.6	(0.38)	94.2	(0.28)	91.9	(0.32)	91.0	(0.45)	92.9	(0.34)
Large city	92.4	(0.57)	91.4	(0.62)	95.2	(0.68)	88.3	(1.07)	87.5	(1.23)	90.5	(1.31)
Albuquerque	96.7	(0.96)	96.2	(1.15)	97.6	(0.84)	92.7	(1.34)	91.3	(1.67)	95.0	(1.65)
Atlanta	94.3	(0.36)	93.7	(0.47)	96.3	(0.55)	95.7	(1.19)	95.7	(1.45)	95.6	(1.82)
Austin	96.0	(0.66)	94.4	(0.85)	98.6	(0.64)	94.7	(1.55)	93.8	(2.15)	96.3	(2.09)
Baltimore City	90.3	(1.69)	89.9	(1.69)	93.1	(3.03)	79.4	(4.00)	77.9	(4.12)	85.2	(5.17)
Boston	94.5	(0.32)	95.3	(0.36)	89.8	(1.33)	90.8	(1.24)	90.8	(1.24)	†	(†)
Charlotte	94.2	(1.21)	92.6	(1.59)	96.5	(1.07)	93.7	(1.58)	93.0	(2.09)	95.8	(1.51)
Chicago	94.2	(1.73)	94.0	(1.88)	95.0	(2.68)	94.1	(1.60)	94.0	(1.72)	95.7	(1.47)
Cleveland	64.6	(0.72)	64.6	(0.72)	‡	(†)	66.7	(1.06)	66.7	(1.06)	‡	(†)
Dallas	86.2	(2.44)	85.7	(2.57)	94.6	(2.17)	82.3	(2.64)	81.4	(2.78)	88.7	(4.81)
Detroit	84.0	(2.92)	84.2	(2.96)	90.4	(4.24)	82.8	(2.62)	83.2	(2.91)	80.7	(3.79)
District of Columbia (DCPS)	83.1	(0.72)	78.4	(0.91)	97.9	(0.70)	77.7	(0.67)	74.7	(0.76)	85.8	(1.57)
Fresno	98.2	(0.85)	98.0	(0.94)	100.0 ¹	(†)	92.7	(1.47)	92.1	(1.55)	100.0 ¹	(†)
Hillsborough County (FL)	98.6	(0.75)	99.1	(0.55)	97.9	(1.64)	95.7	(2.14)	95.9	(2.63)	95.5	(3.12)
Houston	86.9	(2.40)	85.3	(2.67)	94.5	(1.92)	88.2	(2.64)	87.6	(2.99)	92.0	(2.50)
Jefferson County (KY)	91.8	(1.55)	90.7	(1.87)	93.7	(1.64)	91.9	(2.43)	91.4	(2.64)	93.0	(2.28)
Los Angeles	97.6	(1.04)	97.9	(0.85)	99.5	(0.49)	96.3	(1.19)	96.4	(1.21)	96.3	(2.76)
Miami-Dade	94.6	(1.65)	94.5	(1.84)	95.1	(2.34)	97.1	(1.20)	97.4	(1.04)	96.1	(2.22)
Milwaukee	88.3	(1.92)	88.1	(2.00)	89.4	(2.70)	—	(†)	—	(†)	—	(†)
New York City	90.8	(1.61)	90.9	(1.53)	90.5	(4.09)	89.3	(2.03)	89.7	(2.00)	87.7	(4.47)
Philadelphia	95.1	(1.50)	94.7	(1.60)	100.0 ¹	(†)	95.2	(1.80)	95.6	(1.74)	94.8	(2.38)
San Diego	98.0	(1.16)	97.0	(1.79)	100.0 ¹	(†)	89.6	(2.95)	85.1	(4.29)	98.4	(1.01)
Duval County (FL)	—	(†)	—	(†)	—	(†)	95.9	(1.63)	94.6	(2.29)	97.1	(1.34)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-18. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)														
2013														
School characteristic	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	93.8 (0.27)	94.0 (0.31)	93.0 (0.49)	93.3 (0.51)	95.6 (0.64)	97.6 (0.60)	93.8 (1.43)	93.2 (0.69)						
Location														
City	93.2 (0.41)	94.4 (0.61)	91.4 (0.74)	92.7 (0.68)	95.5 (0.82)	97.1 (1.02)	96.5 (0.77)	94.1 (0.93)						
Suburban	94.0 (0.46)	93.6 (0.46)	94.1 (0.74)	94.3 (0.92)	95.4 (1.13)	99.6 (0.29)	93.0 (3.92)	92.9 (1.35)						
Town	93.7 (0.71)	93.5 (0.76)	94.3 (1.39)	94.3 (1.56)	97.1 (1.07)	96.2 (1.62)	90.4 (4.84)	93.0 (2.00)						
Rural	94.3 (0.58)	94.6 (0.59)	94.8 (0.99)	92.3 (1.84)	96.5 (1.31)	94.8 (1.90)	94.4 (1.02)	92.8 (1.24)						
Minority enrollment														
75 percent or more	93.0 (0.56)	95.6 (0.66)	92.1 (0.79)	92.9 (0.80)	95.7 (1.01)	97.9 (0.81)	90.2 (3.38)	96.2 (1.11)						
Less than 75 percent	94.1 (0.31)	94.0 (0.31)	94.1 (0.47)	94.0 (0.69)	95.6 (0.78)	97.4 (0.87)	95.8 (0.89)	92.7 (0.76)						
2015														
School characteristic	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	92.0 (0.31)	92.5 (0.35)	90.2 (0.63)	91.5 (0.75)	94.5 (0.71)	95.1 (1.16)	92.5 (1.47)	92.0 (0.65)						
Location														
City	91.2 (0.59)	92.7 (0.77)	87.7 (1.06)	91.5 (0.96)	93.9 (1.31)	94.8 (2.08)	92.4 (2.45)	91.5 (1.35)						
Suburban	92.3 (0.54)	92.6 (0.60)	91.4 (0.87)	91.2 (1.45)	95.4 (0.75)	94.4 (2.04)	96.6 (1.46)	92.6 (0.91)						
Town	92.6 (0.65)	92.3 (0.68)	94.1 (1.61)	93.7 (1.41)	91.3 (2.72)	96.9 (2.45)	87.5 (4.61)	91.8 (2.21)						
Rural	92.4 (0.59)	92.3 (0.63)	95.0 (1.13)	90.7 (1.83)	92.7 (2.53)	100.0 [†]	93.9 (1.23)	91.9 (1.91)						
Minority enrollment														
75 percent or more	90.7 (0.82)	95.9 (0.70)	88.8 (0.96)	90.2 (1.22)	95.5 (1.12)	97.6 (1.13)	88.3 (3.24)	95.2 (1.30)						
Less than 75 percent	92.5 (0.34)	92.3 (0.36)	92.1 (0.75)	93.5 (0.50)	94.0 (0.81)	92.1 (2.25)	95.0 (1.06)	91.5 (0.76)						

† Not applicable.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-19. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015

(Standard errors in parentheses)														
State	2013													
	Total	Race/ethnicity								Pacific Islander	American Indian/ Alaska Native	Two or more races		
		White	Black	Hispanic	Asian									
Nation (public)	93.8 (0.27)	94.0 (0.31)	93.0 (0.49)	93.3 (0.51)	95.6 (0.64)	97.6 (0.60)	93.8 (1.43)	93.2 (0.69)						
Alabama	99.4 (0.44)	99.1 (0.74)	100.0 ¹ (†)	100.0 ¹ (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	
Alaska	92.1 (0.93)	93.4 (1.03)	96.8 (1.74)	95.6 (1.57)	97.6 (1.09)	92.7 (3.54)	84.7 (2.88)	96.0 (1.67)						
Arizona	89.0 (1.62)	91.7 (1.77)	92.1 (2.15)	87.0 (2.24)	83.9 (6.08)	† (†)	85.9 (8.85)	† (†)	† (†)	† (†)	† (†)	† (†)		
Arkansas	96.9 (0.67)	97.5 (0.76)	94.6 (1.10)	97.0 (1.22)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)		
California	97.3 (0.89)	98.1 (1.06)	96.9 (1.56)	96.9 (1.11)	97.9 (1.52)	† (†)	† (†)	96.5 (2.75)						
Colorado	92.9 (1.79)	93.5 (1.94)	94.2 (3.31)	91.3 (2.92)	93.6 (2.50)	† (†)	† (†)	94.0 (3.12)						
Connecticut	98.1 (0.71)	98.9 (0.49)	95.3 (3.49)	97.2 (1.40)	97.8 (1.44)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)		
Delaware	94.9 (0.90)	96.7 (0.70)	91.4 (2.05)	95.6 (1.27)	99.0 (0.93)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)		
District of Columbia	75.5 (0.64)	91.3 (2.31)	71.0 (0.85)	86.6 (1.86)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)	† (†)		
Florida	95.9 (0.82)	95.3 (1.25)	97.1 (1.15)	95.5 (0.76)	95.1 (2.64)	† (†)	† (†)	98.6 (1.23)						
Georgia	98.5 (0.79)	98.6 (1.16)	97.9 (0.72)	99.0 (0.56)	100.0 ¹ (0.05)	† (†)	† (†)	98.3 (1.57)						
Hawaii	98.4 (0.42)	97.6 (0.93)	96.9 (2.42)	97.8 (1.57)	99.8 (0.14)	97.5 (0.83)	† (†)	98.5 (1.19)						
Idaho	92.5 (1.22)	92.8 (1.37)	† (†)	91.3 (1.68)	† (†)	† (†)	† (†)	91.3 (3.24)						
Illinois	98.3 (0.54)	99.6 (0.22)	97.6 (0.99)	96.3 (1.41)	98.2 (1.36)	† (†)	† (†)	100.0 ¹ (†)						
Indiana	87.0 (1.92)	87.8 (2.01)	80.6 (6.84)	87.6 (3.01)	85.6 (5.26)	† (†)	† (†)	86.6 (3.43)						
Iowa	88.8 (2.05)	88.8 (2.14)	89.5 (4.79)	86.6 (3.84)	94.2 (3.30)	† (†)	† (†)	91.0 (3.51)						
Kansas	92.8 (1.27)	93.0 (1.28)	91.6 (3.03)	92.4 (2.06)	95.1 (2.61)	† (†)	† (†)	90.5 (3.15)						
Kentucky	93.1 (1.26)	94.0 (1.23)	87.1 (2.53)	95.4 (1.93)	93.9 (2.92)	† (†)	† (†)	87.4 (3.90)						
Louisiana	91.4 (1.44)	95.9 (1.24)	87.5 (2.23)	91.9 (3.89)	† (†)	† (†)	† (†)	† (†)						
Maine	95.8 (0.72)	95.8 (0.73)	96.0 (2.30)	† (†)	† (†)	† (†)	† (†)	† (†)						
Maryland	96.4 (0.55)	99.1 (0.31)	93.4 (1.08)	94.4 (1.15)	97.8 (0.81)	† (†)	† (†)	96.3 (2.61)						
Massachusetts	94.6 (1.25)	94.1 (1.64)	96.4 (1.18)	95.4 (1.81)	96.2 (1.82)	† (†)	† (†)	90.8 (4.29)						
Michigan	87.8 (1.63)	87.7 (1.73)	89.3 (2.54)	84.1 (4.31)	88.8 (4.39)	† (†)	† (†)	† (†)						
Minnesota	97.0 (0.73)	97.4 (0.70)	96.4 (2.26)	97.2 (1.41)	96.3 (2.01)	† (†)	† (†)	89.5 (3.97)						
Mississippi	89.0 (2.11)	90.2 (2.50)	87.8 (2.89)	89.9 (3.21)	† (†)	† (†)	† (†)	† (†)						
Missouri	93.7 (1.15)	94.5 (1.14)	91.8 (2.42)	89.3 (3.46)	† (†)	† (†)	† (†)	† (†)						
Montana	97.6 (0.55)	97.9 (0.45)	† (†)	96.0 (2.36)	† (†)	† (†)	97.0 (1.87)	† (†)						
Nebraska	99.0 (0.50)	98.9 (0.56)	100.0 ¹ (†)	100.0 ¹ (†)	98.8 (1.54)	† (†)	† (†)	96.2 (2.82)						
Nevada	96.0 (0.87)	96.7 (0.91)	97.0 (0.98)	95.0 (1.23)	96.0 (1.94)	† (†)	† (†)	96.2 (1.75)						
New Hampshire	97.5 (0.58)	97.5 (0.58)	† (†)	97.2 (1.76)	98.0 (1.02)	† (†)	† (†)	† (†)						
New Jersey	97.6 (0.78)	98.4 (0.77)	97.0 (2.44)	96.1 (1.73)	98.4 (0.83)	† (†)	† (†)	† (†)						
New Mexico	95.1 (0.69)	96.6 (0.90)	95.5 (1.54)	95.3 (0.80)	† (†)	† (†)	87.2 (4.04)	† (†)						
New York	93.1 (1.13)	96.2 (1.08)	88.9 (2.71)	90.3 (1.71)	92.0 (2.40)	† (†)	† (†)	† (†)						
North Carolina	97.0 (0.96)	97.4 (1.19)	96.4 (1.06)	95.5 (1.53)	98.2 (1.20)	† (†)	100.0 ¹ (†)	98.8 (0.66)						
North Dakota	85.9 (0.55)	86.2 (0.53)	77.1 (4.54)	88.5 (3.67)	† (†)	† (†)	85.3 (1.77)	† (†)						
Ohio	70.7 (3.27)	69.8 (3.54)	77.6 (5.99)	54.9 (8.30)	† (†)	† (†)	† (†)	73.2 (5.84)						
Oklahoma	97.6 (0.86)	97.5 (0.98)	95.0 (2.27)	98.5 (1.00)	100.0 ¹ (†)	† (†)	97.9 (0.94)	100.0 ¹ (†)						
Oregon	93.9 (1.28)	94.6 (1.33)	97.5 (1.69)	90.9 (2.61)	97.3 (1.67)	† (†)	† (†)	90.0 (2.67)						

See notes at end of table.

TABLE A-19. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)														
2013														
State	Race/ethnicity													
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races						
Pennsylvania	93.5 (1.29)	95.5 (1.21)	86.4 (2.91)	87.7 (5.68)	98.3 (1.32)	‡ (†)	‡ (†)	‡ (†)	96.3 (2.63)					
Rhode Island	97.4 (0.50)	96.7 (0.63)	98.3 (0.73)	98.5 (0.50)	97.2 (1.84)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
South Carolina	93.9 (1.45)	93.9 (1.63)	93.9 (1.72)	94.0 (2.83)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	92.7 (2.97)					
South Dakota	91.7 (0.77)	92.1 (0.77)	88.3 (3.67)	90.8 (2.38)	‡ (†)	‡ (†)	91.0 (1.80)	‡ (†)	88.0 (3.73)					
Tennessee	97.5 (0.92)	97.4 (1.29)	98.8 (0.91)	93.9 (2.14)	98.3 (1.77)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Texas	93.1 (1.14)	96.7 (1.18)	94.8 (1.83)	90.2 (1.73)	95.4 (2.59)	‡ (†)	‡ (†)	‡ (†)	93.2 (3.35)					
Utah	93.8 (1.25)	93.8 (1.29)	‡ (†)	93.2 (2.13)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Vermont	95.0 (0.38)	95.0 (0.40)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.7 (2.68)					
Virginia	94.1 (1.06)	95.5 (1.18)	91.9 (2.09)	91.4 (1.69)	94.4 (2.80)	‡ (†)	‡ (†)	‡ (†)	94.5 (2.68)					
Washington	93.9 (1.48)	95.4 (1.30)	93.5 (2.87)	88.7 (4.66)	94.4 (2.44)	‡ (†)	‡ (†)	‡ (†)	94.5 (1.84)					
West Virginia	88.5 (1.60)	88.4 (1.65)	85.8 (3.83)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Wisconsin	88.3 (1.71)	88.5 (1.97)	87.9 (2.21)	84.2 (3.19)	92.8 (2.24)	‡ (†)	95.9 (2.61)	‡ (†)	‡ (†)					
Wyoming	97.4 (0.24)	97.6 (0.26)	‡ (†)	98.0 (0.47)	‡ (†)	‡ (†)	94.5 (1.70)	‡ (†)	‡ (†)					
Department of Defense Dependents Schools	95.1 (0.22)	95.6 (0.52)	92.8 (0.90)	96.3 (0.64)	93.8 (2.02)	‡ (†)	‡ (†)	‡ (†)	94.1 (1.35)					
2015														
State	Race/ethnicity													
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races						
Nation (public)	92.0 (0.31)	92.5 (0.35)	90.2 (0.63)	91.5 (0.75)	94.5 (0.71)	95.1 (1.16)	92.5 (1.47)	92.0 (0.65)						
Alabama	99.7 (0.21)	99.8 (0.13)	99.7 (0.27)	99.2 (0.82)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Alaska	91.2 (1.45)	91.3 (1.90)	‡ (†)	89.9 (3.12)	92.0 (4.26)	100.0 ¹	87.7 (3.91)	95.5 (1.86)						
Arizona	89.5 (1.82)	89.0 (2.39)	88.7 (3.87)	90.7 (2.17)	‡ (†)	‡ (†)	81.7 (9.42)	‡ (†)	‡ (†)					
Arkansas	95.1 (1.61)	96.5 (1.70)	89.1 (3.17)	97.4 (1.34)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
California	94.2 (1.49)	98.4 (0.83)	91.0 (3.52)	91.9 (2.36)	96.7 (1.45)	‡ (†)	‡ (†)	‡ (†)	96.7 (2.28)					
Colorado	90.6 (1.80)	91.9 (1.78)	94.9 (2.35)	86.7 (2.94)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	99.4 (0.48)					
Connecticut	97.1 (0.91)	99.0 (0.36)	89.0 (4.88)	96.4 (1.46)	97.7 (1.61)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Delaware	96.3 (0.62)	96.9 (0.80)	94.2 (1.18)	96.8 (1.07)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	100.0 ¹					
District of Columbia	71.4 (0.75)	79.4 (2.15)	69.5 (1.02)	72.6 (2.10)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Florida	92.0 (1.65)	92.3 (1.73)	85.9 (3.78)	94.9 (1.45)	96.8 (2.12)	‡ (†)	‡ (†)	‡ (†)	92.5 (3.14)					
Georgia	97.6 (0.76)	98.5 (0.61)	97.1 (1.32)	95.2 (2.75)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	96.6 (1.98)					
Hawaii	99.0 (0.40)	99.4 (0.44)	‡ (†)	98.9 (0.77)	99.6 (0.34)	98.3 (0.83)	‡ (†)	‡ (†)	98.7 (0.92)					
Idaho	90.5 (1.48)	90.9 (1.49)	‡ (†)	89.5 (2.11)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Illinois	97.6 (0.68)	98.8 (0.72)	94.4 (1.62)	96.9 (1.17)	99.8 (0.23)	‡ (†)	‡ (†)	‡ (†)	98.3 (1.67)					
Indiana	82.7 (2.14)	81.2 (2.31)	84.3 (4.63)	86.3 (3.29)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	87.3 (3.80)					
Iowa	88.9 (1.59)	89.1 (1.56)	85.3 (5.19)	92.2 (2.52)	88.3 (6.96)	‡ (†)	‡ (†)	‡ (†)	82.0 (4.14)					
Kansas	93.5 (1.55)	95.3 (1.41)	86.3 (4.40)	90.5 (2.50)	95.8 (2.43)	‡ (†)	‡ (†)	‡ (†)	91.8 (3.06)					
Kentucky	92.9 (1.75)	93.1 (1.92)	92.1 (2.18)	87.1 (4.43)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.3 (2.16)					
Louisiana	89.8 (2.62)	92.5 (2.47)	87.0 (4.21)	81.0 (6.19)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					

See notes at end of table.

TABLE A-19. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)													
State	2015												
	Total	Race/ethnicity										Two or more races	
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/Alaska Native						
Maine	93.8 (0.86)	94.1 (0.89)	87.6 (4.53)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Maryland	93.5 (1.51)	96.4 (1.34)	88.8 (3.01)	95.2 (2.10)	95.0 (3.09)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	93.2 (3.09)	‡ (†)
Massachusetts	94.6 (1.05)	94.7 (1.31)	91.7 (2.05)	94.6 (1.67)	96.1 (2.42)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.5 (2.37)	‡ (†)
Michigan	83.1 (2.12)	83.4 (2.30)	80.3 (4.91)	81.4 (4.28)	92.6 (3.64)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	85.2 (5.89)	‡ (†)
Minnesota	94.2 (1.38)	94.0 (1.76)	96.4 (1.50)	94.1 (2.28)	92.2 (3.47)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.2 (2.58)	‡ (†)	94.8 (2.85)	‡ (†)
Mississippi	91.8 (1.81)	92.7 (1.79)	91.6 (2.79)	86.1 (11.14)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Missouri	92.5 (1.43)	94.1 (1.35)	84.0 (5.28)	93.9 (2.98)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.7 (3.10)	‡ (†)
Montana	97.7 (0.45)	97.8 (0.45)	‡ (†)	99.0 (0.96)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.5 (1.30)	‡ (†)	95.7 (3.02)	‡ (†)
Nebraska	99.4 (0.35)	99.6 (0.35)	100.0 ¹	‡ (†)	98.2 (1.21)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	100.0 ¹	‡ (†)
Nevada	89.5 (1.54)	95.0 (1.10)	78.4 (3.85)	87.7 (2.45)	95.0 (1.99)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	93.9 (2.30)	‡ (†)
New Hampshire	97.0 (0.77)	97.0 (0.79)	‡ (†)	95.9 (2.20)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
New Jersey	99.1 (0.44)	99.5 (0.38)	99.7 (0.34)	98.2 (0.97)	98.9 (1.08)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
New Mexico	93.2 (1.13)	91.3 (1.76)	‡ (†)	93.6 (1.23)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.8 (1.56)	‡ (†)	‡ (†)	‡ (†)
New York	94.8 (0.99)	97.6 (1.06)	91.0 (2.91)	92.4 (1.56)	92.3 (2.54)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
North Carolina	95.1 (1.04)	96.6 (1.16)	92.9 (1.79)	95.2 (1.46)	96.1 (2.30)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	84.6 (7.37)	‡ (†)	93.4 (3.10)	‡ (†)
North Dakota	90.1 (0.50)	90.1 (0.58)	90.3 (3.20)	89.6 (3.04)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	89.1 (1.50)	‡ (†)	‡ (†)	‡ (†)
Ohio	63.6 (3.05)	63.4 (3.26)	71.4 (5.44)	51.0 (6.24)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	53.3 (6.80)	‡ (†)
Oklahoma	96.3 (1.01)	95.9 (1.25)	94.2 (2.49)	97.1 (1.45)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	98.6 (0.87)	‡ (†)	95.4 (1.98)	‡ (†)
Oregon	91.7 (1.78)	93.0 (1.60)	‡ (†)	88.3 (3.72)	93.6 (3.01)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.2 (2.46)	‡ (†)	89.8 (3.09)	‡ (†)
Pennsylvania	91.5 (2.08)	93.5 (1.89)	76.5 (7.17)	93.1 (3.02)	98.7 (1.22)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.2 (2.79)	‡ (†)
Rhode Island	96.8 (0.54)	97.2 (0.55)	94.0 (2.79)	96.2 (0.96)	98.6 (1.37)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.8 (1.98)	‡ (†)
South Carolina	93.6 (1.06)	95.2 (1.03)	90.6 (2.23)	94.9 (1.91)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	92.0 (2.31)	‡ (†)
South Dakota	88.4 (0.96)	89.1 (0.97)	83.4 (5.34)	86.7 (2.73)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	87.7 (3.10)	‡ (†)	84.4 (4.24)	‡ (†)
Tennessee	96.2 (1.21)	96.7 (1.20)	93.8 (3.51)	97.9 (1.20)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Texas	91.6 (1.37)	95.4 (1.97)	93.0 (2.02)	89.1 (1.86)	91.2 (4.34)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.5 (2.32)	‡ (†)
Utah	93.9 (1.22)	94.0 (1.20)	‡ (†)	91.9 (2.98)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Vermont	94.0 (0.46)	94.2 (0.45)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Virginia	96.1 (0.77)	97.4 (0.78)	95.6 (1.34)	92.6 (1.82)	96.9 (1.42)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.2 (2.71)	‡ (†)
Washington	87.1 (2.13)	88.6 (2.12)	89.6 (5.26)	83.9 (4.96)	86.2 (3.17)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.9 (1.72)	‡ (†)	86.3 (3.24)	‡ (†)
West Virginia	86.3 (1.72)	86.8 (1.74)	81.0 (5.39)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	79.4 (5.12)	‡ (†)
Wisconsin	84.3 (2.05)	84.6 (2.36)	81.6 (6.32)	86.1 (3.60)	78.6 (4.68)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	79.5 (7.38)	‡ (†)	‡ (†)	‡ (†)
Wyoming	95.8 (0.33)	95.6 (0.37)	‡ (†)	96.1 (1.00)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.6 (1.85)	‡ (†)	‡ (†)	‡ (†)
Department of Defense Dependents Schools	95.3 (0.24)	95.2 (0.56)	96.0 (1.26)	94.8 (1.29)	96.0 (2.00)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.2 (1.43)	‡ (†)

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-20. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015

(Standard errors in parentheses)																
2013																
Jurisdiction	Race/ethnicity															
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races								
Nation (public)	93.8	(0.27)	94.0	(0.31)	93.0	(0.49)	93.3	(0.51)	95.6	(0.64)	97.6	(0.60)	93.8	(1.43)	93.2	(0.69)
Large city	92.4	(0.69)	93.2	(1.17)	90.1	(0.95)	92.7	(0.98)	94.4	(1.14)	97.0	(1.41)	97.2	(1.04)	94.8	(1.14)
Albuquerque	97.0	(0.68)	97.9	(1.01)	†	(†)	96.3	(0.86)	†	(†)	†	(†)	†	(†)	†	(†)
Atlanta	94.4	(0.27)	97.6	(0.60)	93.0	(0.37)	97.8	(1.23)	†	(†)	†	(†)	†	(†)	†	(†)
Austin	92.7	(1.11)	93.5	(1.20)	94.6	(2.80)	91.7	(1.52)	†	(†)	†	(†)	†	(†)	†	(†)
Baltimore City	85.5	(2.52)	86.2	(6.60)	85.9	(2.41)	†	(†)	†	(†)	†	(†)	†	(†)	†	(†)
Boston	94.5	(0.28)	94.7	(1.34)	95.9	(0.50)	93.2	(0.70)	95.3	(1.44)	†	(†)	†	(†)	†	(†)
Charlotte	95.7	(0.92)	98.7	(0.63)	94.5	(1.64)	92.8	(1.75)	96.9	(1.91)	†	(†)	†	(†)	†	(†)
Chicago	95.7	(1.30)	96.8	(2.20)	94.8	(2.10)	96.1	(1.56)	96.3	(3.87)	†	(†)	†	(†)	†	(†)
Cleveland	64.8	(0.79)	65.8	(3.42)	65.0	(1.17)	63.3	(2.72)	†	(†)	†	(†)	†	(†)	†	(†)
Dallas	94.6	(1.57)	†	(†)	97.1	(1.26)	93.7	(2.01)	†	(†)	†	(†)	†	(†)	†	(†)
Detroit	86.5	(2.55)	†	(†)	84.4	(2.73)	95.5	(2.14)	†	(†)	†	(†)	†	(†)	†	(†)
District of Columbia (DCPS)	85.5	(0.70)	95.7	(2.01)	82.5	(1.03)	89.1	(2.03)	†	(†)	†	(†)	†	(†)	†	(†)
Fresno	98.3	(0.56)	99.4	(0.56)	95.2	(2.05)	98.4	(0.55)	98.7	(1.01)	†	(†)	†	(†)	†	(†)
Hillsborough County (FL)	98.2	(0.84)	99.1	(0.59)	96.8	(1.96)	98.2	(1.00)	†	(†)	†	(†)	†	(†)	†	(†)
Houston	91.8	(1.41)	88.9	(2.68)	96.3	(1.19)	90.8	(1.77)	†	(†)	†	(†)	†	(†)	†	(†)
Jefferson County (KY)	89.4	(1.66)	92.2	(1.56)	85.4	(2.37)	91.9	(3.34)	†	(†)	†	(†)	†	(†)	†	(†)
Los Angeles	97.6	(0.99)	98.8	(1.28)	94.8	(3.21)	97.8	(0.91)	98.9	(1.03)	†	(†)	†	(†)	†	(†)
Miami-Dade	98.6	(0.75)	100.0 ¹	(†)	96.4	(2.38)	99.2	(0.44)	†	(†)	†	(†)	†	(†)	†	(†)
Milwaukee	87.7	(1.65)	90.0	(2.34)	88.6	(2.25)	83.7	(3.40)	92.4	(5.15)	†	(†)	†	(†)	†	(†)
New York City	91.3	(1.45)	91.7	(3.26)	92.2	(2.19)	91.6	(1.59)	89.1	(3.65)	†	(†)	†	(†)	†	(†)
Philadelphia	94.0	(1.81)	98.4	(0.77)	90.8	(2.75)	97.5	(1.42)	98.3	(1.33)	†	(†)	†	(†)	†	(†)
San Diego	97.6	(1.25)	100.0 ¹	(†)	97.3	(2.11)	96.1	(2.14)	98.0	(1.23)	†	(†)	†	(†)	100.0 ¹	(†)
Duval County (FL)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)
2015																
Jurisdiction	Race/ethnicity															
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races								
Nation (public)	92.0	(0.31)	92.5	(0.35)	90.2	(0.63)	91.5	(0.75)	94.5	(0.71)	95.1	(1.16)	92.5	(1.47)	92.0	(0.65)
Large city	90.2	(0.82)	92.9	(0.90)	85.1	(1.45)	90.8	(1.24)	94.0	(1.45)	96.6	(1.48)	92.9	(3.28)	92.0	(1.81)
Albuquerque	94.6	(1.25)	95.0	(2.07)	†	(†)	94.4	(1.47)	†	(†)	†	(†)	†	(†)	†	(†)
Atlanta	95.9	(1.11)	94.9	(1.85)	96.4	(1.20)	95.8	(2.95)	†	(†)	†	(†)	†	(†)	†	(†)
Austin	94.3	(1.70)	99.1	(0.63)	†	(†)	92.7	(2.39)	†	(†)	†	(†)	†	(†)	†	(†)
Baltimore City	82.7	(3.11)	93.3	(3.66)	80.3	(3.60)	89.8	(4.79)	†	(†)	†	(†)	†	(†)	†	(†)
Boston	93.3	(1.26)	96.4	(1.62)	89.0	(2.31)	94.5	(1.52)	97.9	(1.65)	†	(†)	†	(†)	†	(†)
Charlotte	96.3	(1.13)	95.4	(1.89)	97.3	(1.14)	95.2	(1.98)	†	(†)	†	(†)	†	(†)	†	(†)
Chicago	93.6	(1.68)	98.5	(1.42)	91.0	(2.95)	93.8	(2.54)	98.6	(1.39)	†	(†)	†	(†)	†	(†)
Cleveland	67.0	(1.01)	71.5	(3.28)	63.8	(1.35)	73.5	(3.42)	†	(†)	†	(†)	†	(†)	†	(†)

See notes at end of table.

TABLE A-20. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)												
Jurisdiction	2015											
	Race/ethnicity											Two or more races
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native					
Dallas	86.6 (3.91)	‡ (†)	85.6 (7.19)	85.7 (4.33)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Detroit	86.1 (2.80)	‡ (†)	84.2 (3.36)	95.2 (4.00)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
District of Columbia (DCPS)	79.9 (0.72)	85.7 (2.05)	79.3 (1.01)	75.7 (2.54)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Fresno	93.2 (1.46)	92.3 (3.09)	94.8 (2.93)	92.6 (1.64)	94.8 (2.31)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Hillsborough County (FL)	97.5 (1.21)	97.2 (1.41)	99.4 (0.63)	96.5 (2.09)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Houston	93.2 (1.58)	92.9 (4.26)	96.3 (1.57)	91.6 (2.21)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Jefferson County (KY)	91.1 (2.42)	91.5 (2.75)	89.2 (3.15)	92.9 (3.36)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Los Angeles	96.3 (1.26)	96.3 (3.45)	96.7 (2.30)	96.1 (1.52)	100.0 ¹ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Miami-Dade	96.5 (1.15)	96.8 (2.26)	95.7 (2.75)	96.8 (1.23)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Milwaukee	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)
New York City	89.8 (2.00)	92.4 (3.64)	87.8 (4.70)	89.3 (2.26)	90.8 (3.50)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Philadelphia	95.4 (1.61)	97.1 (1.91)	95.0 (1.93)	95.5 (2.65)	100.0 ¹ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	89.8 (4.02)	‡ (†)
San Diego	91.7 (1.95)	98.6 (0.95)	83.3 (5.81)	89.7 (2.62)	91.5 (3.01)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.2 (3.09)	‡ (†)
Duval County (FL)	91.5 (2.36)	89.6 (3.26)	92.3 (2.74)	94.7 (2.51)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-21. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and selected school characteristics: 2013 and 2015

School characteristic	(Standard errors in parentheses)					
	2013			2015		
	Total	Disability status		Total	Disability status	
With a disability		Without a disability	With a disability		Without a disability	
Nation (public)	93.8 (0.27)	93.3 (0.41)	93.8 (0.29)	92.0 (0.31)	92.2 (0.37)	92.0 (0.34)
Location						
City	93.2 (0.41)	92.1 (0.66)	93.3 (0.45)	91.2 (0.59)	91.0 (0.94)	91.2 (0.61)
Suburban	94.0 (0.46)	92.8 (0.76)	94.1 (0.48)	92.3 (0.54)	92.3 (0.76)	92.2 (0.59)
Town	93.7 (0.71)	93.3 (1.22)	93.8 (0.74)	92.6 (0.65)	94.0 (0.71)	92.4 (0.70)
Rural	94.3 (0.58)	95.4 (0.55)	94.1 (0.61)	92.4 (0.59)	92.8 (0.64)	92.4 (0.62)
Minority enrollment						
75 percent or more	93.0 (0.56)	91.8 (0.86)	93.1 (0.58)	90.7 (0.82)	89.4 (1.40)	90.9 (0.83)
Less than 75 percent	94.1 (0.31)	93.8 (0.46)	94.1 (0.32)	92.5 (0.34)	93.2 (0.38)	92.4 (0.37)

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-22. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015

State	(Standard errors in parentheses)					
	2013			2015		
	Total	Disability status		Total	Disability status	
With a disability		Without a disability	With a disability		Without a disability	
Nation (public)	93.8 (0.27)	93.3 (0.41)	93.8 (0.29)	92.0 (0.31)	92.2 (0.37)	92.0 (0.34)
Alabama	99.4 (0.44)	99.5 (0.52)	99.4 (0.44)	99.7 (0.21)	100.0 ¹ (†)	99.7 (0.24)
Alaska	92.1 (0.93)	93.1 (1.63)	91.9 (0.98)	91.2 (1.45)	91.9 (2.23)	91.2 (1.49)
Arizona	89.0 (1.62)	88.6 (2.28)	89.1 (1.65)	89.5 (1.82)	92.4 (2.27)	89.0 (1.89)
Arkansas	96.9 (0.67)	97.1 (1.12)	96.9 (0.73)	95.1 (1.61)	96.0 (1.62)	94.9 (1.67)
California	97.3 (0.89)	96.3 (2.07)	97.4 (0.89)	94.2 (1.49)	91.3 (3.13)	94.5 (1.47)
Colorado	92.9 (1.79)	94.3 (1.82)	92.7 (1.85)	90.6 (1.80)	87.7 (3.39)	90.9 (1.74)
Connecticut	98.1 (0.71)	98.3 (0.82)	98.1 (0.74)	97.1 (0.91)	98.5 (0.81)	96.9 (0.99)
Delaware	94.9 (0.90)	95.7 (1.37)	94.8 (0.93)	96.3 (0.62)	97.1 (1.10)	96.2 (0.64)
District of Columbia	75.5 (0.64)	70.3 (2.95)	76.3 (0.63)	71.4 (0.75)	74.6 (2.41)	70.9 (0.79)
Florida	95.9 (0.82)	93.4 (2.93)	96.3 (0.63)	92.0 (1.65)	91.9 (2.25)	92.0 (1.71)
Georgia	98.5 (0.79)	95.8 (2.21)	98.7 (0.82)	97.6 (0.76)	97.4 (1.23)	97.6 (0.79)
Hawaii	98.4 (0.42)	99.2 (0.66)	98.3 (0.44)	99.0 (0.40)	95.9 (2.03)	99.3 (0.39)
Idaho	92.5 (1.22)	90.5 (2.82)	92.7 (1.23)	90.5 (1.48)	85.3 (2.55)	91.1 (1.48)
Illinois	98.3 (0.54)	99.3 (0.32)	98.2 (0.61)	97.6 (0.68)	98.8 (0.47)	97.4 (0.77)
Indiana	87.0 (1.92)	86.4 (3.03)	87.1 (1.88)	82.7 (2.14)	81.1 (2.66)	83.0 (2.22)
Iowa	88.8 (2.05)	86.6 (2.87)	89.2 (2.03)	88.9 (1.59)	87.9 (2.74)	89.1 (1.65)
Kansas	92.8 (1.27)	94.3 (1.18)	92.5 (1.36)	93.5 (1.55)	92.2 (2.28)	93.7 (1.58)
Kentucky	93.1 (1.26)	92.5 (1.71)	93.2 (1.29)	92.9 (1.75)	92.6 (1.85)	92.9 (1.85)
Louisiana	91.4 (1.44)	89.5 (1.71)	91.8 (1.60)	89.8 (2.62)	88.9 (3.01)	90.0 (2.66)
Maine	95.8 (0.72)	94.8 (1.17)	96.1 (0.79)	93.8 (0.86)	94.9 (1.17)	93.5 (0.95)
Maryland	96.4 (0.55)	96.8 (1.46)	96.4 (0.55)	93.5 (1.51)	93.5 (1.66)	93.5 (1.58)
Massachusetts	94.6 (1.25)	94.0 (1.81)	94.7 (1.19)	94.6 (1.05)	95.4 (1.17)	94.5 (1.19)
Michigan	87.8 (1.63)	87.1 (3.47)	87.9 (1.68)	83.1 (2.12)	89.4 (2.15)	82.2 (2.24)
Minnesota	97.0 (0.73)	98.3 (0.77)	96.8 (0.82)	94.2 (1.38)	94.2 (2.46)	94.2 (1.31)
Mississippi	89.0 (2.11)	87.3 (2.77)	89.1 (2.19)	91.8 (1.81)	89.6 (2.27)	92.1 (1.85)

See notes at end of table.

TABLE A-22. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015—Continued

(Standard errors in parentheses)									
State	2013			2015					
	Total	Disability status		Total	Disability status		Total	Disability status	
		With a disability	Without a disability		With a disability	Without a disability			
Missouri	93.7 (1.15)	92.6 (1.93)	93.9 (1.08)	92.5 (1.43)	94.7 (1.26)	92.1 (1.53)			
Montana	97.6 (0.55)	97.7 (1.04)	97.6 (0.56)	97.7 (0.45)	96.2 (1.43)	97.9 (0.47)			
Nebraska	99.0 (0.50)	99.5 (0.45)	99.0 (0.54)	99.4 (0.35)	99.5 (0.37)	99.4 (0.36)			
Nevada	96.0 (0.87)	95.5 (1.45)	96.0 (0.88)	89.5 (1.54)	91.3 (2.73)	89.2 (1.61)			
New Hampshire	97.5 (0.58)	99.2 (0.55)	97.2 (0.63)	97.0 (0.77)	95.9 (1.86)	97.2 (0.80)			
New Jersey	97.6 (0.78)	97.7 (1.24)	97.6 (0.83)	99.1 (0.44)	99.3 (0.45)	99.1 (0.51)			
New Mexico	95.1 (0.69)	95.0 (1.12)	95.1 (0.73)	93.2 (1.13)	96.0 (1.32)	92.8 (1.21)			
New York	93.1 (1.13)	90.6 (2.15)	93.6 (1.17)	94.8 (0.99)	92.9 (1.46)	95.2 (1.06)			
North Carolina	97.0 (0.96)	95.7 (1.27)	97.2 (0.97)	95.1 (1.04)	97.1 (0.91)	94.9 (1.13)			
North Dakota	85.9 (0.55)	83.7 (1.92)	86.2 (0.62)	90.1 (0.50)	86.8 (1.94)	90.5 (0.58)			
Ohio	70.7 (3.27)	76.5 (3.37)	69.8 (3.46)	63.6 (3.05)	65.8 (4.26)	63.2 (3.25)			
Oklahoma	97.6 (0.86)	98.0 (0.97)	97.5 (0.89)	96.3 (1.01)	95.2 (1.55)	96.5 (1.00)			
Oregon	93.9 (1.28)	94.9 (1.31)	93.7 (1.33)	91.7 (1.78)	94.6 (1.56)	91.3 (1.90)			
Pennsylvania	93.5 (1.29)	92.7 (1.72)	93.7 (1.33)	91.5 (2.08)	93.9 (1.92)	90.9 (2.21)			
Rhode Island	97.4 (0.50)	98.4 (0.77)	97.2 (0.55)	96.8 (0.54)	98.3 (0.55)	96.6 (0.61)			
South Carolina	93.9 (1.45)	92.4 (2.25)	94.1 (1.47)	93.6 (1.06)	92.4 (1.77)	93.8 (1.08)			
South Dakota	91.7 (0.77)	90.7 (1.63)	91.9 (0.81)	88.4 (0.96)	88.7 (1.74)	88.4 (1.02)			
Tennessee	97.5 (0.92)	96.8 (0.95)	97.6 (1.02)	96.2 (1.21)	97.2 (1.14)	96.0 (1.26)			
Texas	93.1 (1.14)	95.2 (1.69)	92.9 (1.20)	91.6 (1.37)	92.6 (2.61)	91.5 (1.41)			
Utah	93.8 (1.25)	96.3 (1.50)	93.5 (1.28)	93.9 (1.22)	94.0 (1.97)	93.8 (1.21)			
Vermont	95.0 (0.38)	96.0 (1.05)	94.8 (0.42)	94.0 (0.46)	93.0 (1.59)	94.2 (0.45)			
Virginia	94.1 (1.06)	92.6 (1.79)	94.4 (1.18)	96.1 (0.77)	96.7 (1.41)	96.1 (0.86)			
Washington	93.9 (1.48)	96.0 (1.58)	93.6 (1.51)	87.1 (2.13)	89.2 (2.88)	86.8 (2.18)			
West Virginia	88.5 (1.60)	86.9 (1.85)	88.8 (1.68)	86.3 (1.72)	86.5 (2.35)	86.2 (1.76)			
Wisconsin	88.3 (1.71)	90.1 (2.17)	88.0 (1.77)	84.3 (2.05)	88.3 (2.97)	83.8 (2.12)			
Wyoming	97.4 (0.24)	95.6 (0.92)	97.7 (0.26)	95.8 (0.33)	95.8 (1.05)	95.8 (0.42)			
Department of Defense Dependents Schools	95.1 (0.22)	94.7 (1.34)	95.1 (0.23)	95.3 (0.24)	97.0 (1.04)	95.0 (0.30)			

† Not applicable.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-23. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)									
Jurisdiction	2013			2015					
	Total	Disability status		Total	Disability status		Total	Disability status	
		With a disability	Without a disability		With a disability	Without a disability			
Nation (public)	93.8 (0.27)	93.3 (0.41)	93.8 (0.29)	92.0 (0.31)	92.2 (0.37)	92.0 (0.34)			
Large city	92.4 (0.69)	90.4 (0.99)	92.6 (0.71)	90.2 (0.82)	89.0 (1.44)	90.3 (0.83)			
Albuquerque	97.0 (0.68)	96.9 (1.21)	97.0 (0.79)	94.6 (1.25)	95.4 (1.93)	94.5 (1.37)			
Atlanta	94.4 (0.27)	92.7 (1.78)	94.5 (0.32)	95.9 (1.11)	93.8 (2.32)	96.1 (1.19)			
Austin	92.7 (1.11)	91.8 (2.56)	92.8 (1.11)	94.3 (1.70)	96.2 (2.25)	93.9 (1.75)			
Baltimore City	85.5 (2.52)	† (†)	85.8 (2.53)	82.7 (3.11)	80.6 (5.64)	83.0 (3.07)			
Boston	94.5 (0.28)	94.2 (1.36)	94.6 (0.37)	93.3 (1.26)	91.3 (2.48)	93.8 (1.27)			
Charlotte	95.7 (0.92)	95.1 (2.09)	95.8 (0.87)	96.3 (1.13)	94.6 (2.05)	96.5 (1.15)			
Chicago	95.7 (1.30)	96.1 (1.73)	95.7 (1.35)	93.6 (1.68)	93.6 (2.51)	93.6 (1.81)			
Cleveland	64.8 (0.79)	72.1 (2.05)	63.1 (0.97)	67.0 (1.01)	67.2 (3.88)	67.0 (1.07)			

See notes at end of table.

TABLE A-23. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)												
Jurisdiction	2013				2015							
	Total	Disability status		Total	Disability status		Total	Disability status				
		With a disability	Without a disability		With a disability	Without a disability						
Dallas	94.6	(1.57)	89.2	(4.62)	95.0	(1.61)	86.6	(3.91)	†	(†)	86.0	(4.04)
Detroit	86.5	(2.55)	82.4	(4.38)	87.0	(2.50)	86.1	(2.80)	84.4	(4.73)	86.3	(2.78)
District of Columbia (DCPS)	85.5	(0.70)	82.4	(3.07)	85.9	(0.72)	79.9	(0.72)	86.1	(2.76)	79.1	(0.86)
Fresno	98.3	(0.56)	97.5	(1.08)	98.4	(0.59)	93.2	(1.46)	97.5	(1.70)	92.8	(1.62)
Hillsborough County (FL)	98.2	(0.84)	97.2	(1.38)	98.4	(0.78)	97.5	(1.21)	96.8	(2.59)	97.6	(1.08)
Houston	91.8	(1.41)	94.2	(2.68)	91.7	(1.39)	93.2	(1.58)	95.9	(2.01)	93.0	(1.68)
Jefferson County (KY)	89.4	(1.66)	85.0	(4.36)	89.9	(1.64)	91.1	(2.42)	90.2	(3.77)	91.2	(2.41)
Los Angeles	97.6	(0.99)	98.6	(0.99)	97.5	(1.06)	96.3	(1.26)	90.9	(4.36)	96.9	(1.12)
Miami-Dade	98.6	(0.75)	98.3	(1.08)	98.6	(0.73)	96.5	(1.15)	94.9	(2.69)	96.7	(1.15)
Milwaukee	87.7	(1.65)	90.7	(1.89)	87.1	(1.87)	—	(†)	—	(†)	—	(†)
New York City	91.3	(1.45)	87.0	(3.32)	92.2	(1.57)	89.8	(2.00)	84.7	(3.01)	91.2	(2.18)
Philadelphia	94.0	(1.81)	87.5	(3.91)	95.0	(1.84)	95.4	(1.61)	94.6	(2.27)	95.5	(1.77)
San Diego	97.6	(1.25)	96.8	(2.09)	97.7	(1.29)	91.7	(1.95)	87.8	(4.39)	92.1	(1.80)
Duval County (FL)	—	(†)	—	(†)	—	(†)	91.5	(2.36)	92.6	(2.98)	91.3	(2.43)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-24. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)												
School characteristic	2013					2015						
	Total	English language learner (ELL) status			Total	English language learner (ELL) status						
		ELL	Not ELL	ELL		Not ELL						
Nation (public)	93.8	(0.27)	91.7	(0.95)	94.0	(0.25)	92.0	(0.31)	90.4	(1.07)	92.2	(0.31)
Location												
City	93.2	(0.41)	91.4	(1.27)	93.5	(0.41)	91.2	(0.59)	90.2	(1.32)	91.4	(0.62)
Suburban	94.0	(0.46)	92.7	(1.53)	94.1	(0.41)	92.3	(0.54)	90.2	(1.94)	92.5	(0.51)
Town	93.7	(0.71)	93.1	(1.94)	93.7	(0.71)	92.6	(0.65)	93.0	(1.93)	92.6	(0.65)
Rural	94.3	(0.58)	89.4	(3.68)	94.5	(0.53)	92.4	(0.59)	89.6	(4.12)	92.5	(0.58)
Minority enrollment												
75 percent or more	93.0	(0.56)	91.7	(1.14)	93.4	(0.52)	90.7	(0.82)	89.6	(1.58)	91.1	(0.74)
Less than 75 percent	94.1	(0.31)	91.7	(1.63)	94.2	(0.29)	92.5	(0.34)	91.9	(0.78)	92.6	(0.35)

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-25. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015

(Standard errors in parentheses)												
State	2013					2015						
	Total	English language learner (ELL) status			Total	English language learner (ELL) status						
		ELL	Not ELL	ELL		Not ELL						
Nation (public)	93.8	(0.27)	91.7	(0.95)	94.0	(0.25)	92.0	(0.31)	90.4	(1.07)	92.2	(0.31)
Alabama	99.4	(0.44)	‡	(†)	99.4	(0.45)	99.7	(0.21)	‡	(†)	99.7	(0.21)
Alaska	92.1	(0.93)	83.9	(4.31)	93.4	(0.89)	91.2	(1.45)	96.2	(2.16)	90.5	(1.60)
Arizona	89.0	(1.62)	88.1	(4.25)	89.1	(1.60)	89.5	(1.82)	91.7	(3.38)	89.2	(1.89)
Arkansas	96.9	(0.67)	97.0	(1.23)	96.9	(0.66)	95.1	(1.61)	98.8	(0.90)	94.7	(1.71)
California	97.3	(0.89)	96.1	(1.49)	97.7	(0.82)	94.2	(1.49)	91.2	(2.76)	95.3	(1.20)
Colorado	92.9	(1.79)	88.2	(4.86)	93.7	(1.67)	90.6	(1.80)	86.5	(3.64)	91.2	(1.71)
Connecticut	98.1	(0.71)	98.1	(1.77)	98.1	(0.72)	97.1	(0.91)	97.5	(1.39)	97.1	(0.93)
Delaware	94.9	(0.90)	100.0 ¹	(†)	94.8	(0.92)	96.3	(0.62)	98.1	(1.47)	96.2	(0.66)
District of Columbia	75.5	(0.64)	90.2	(2.65)	74.4	(0.71)	71.4	(0.75)	67.0	(4.15)	71.6	(0.78)
Florida	95.9	(0.82)	94.7	(1.41)	96.0	(0.88)	92.0	(1.65)	90.3	(3.04)	92.2	(1.62)
Georgia	98.5	(0.79)	98.8	(1.38)	98.5	(0.82)	97.6	(0.76)	96.1	(3.51)	97.6	(0.72)
Hawaii	98.4	(0.42)	98.1	(1.05)	98.4	(0.46)	99.0	(0.40)	100.0 ¹	(†)	98.9	(0.43)
Idaho	92.5	(1.22)	86.8	(4.13)	92.8	(1.25)	90.5	(1.48)	87.9	(4.36)	90.6	(1.45)
Illinois	98.3	(0.54)	95.0	(3.39)	98.6	(0.47)	97.6	(0.68)	97.3	(1.05)	97.6	(0.70)
Indiana	87.0	(1.92)	84.4	(4.72)	87.1	(1.93)	82.7	(2.14)	86.9	(3.95)	82.3	(2.18)
Iowa	88.8	(2.05)	85.7	(5.59)	89.0	(2.06)	88.9	(1.59)	90.4	(3.79)	88.8	(1.57)
Kansas	92.8	(1.27)	92.5	(2.55)	92.8	(1.30)	93.5	(1.55)	91.5	(2.97)	93.8	(1.51)
Kentucky	93.1	(1.26)	95.2	(2.11)	93.1	(1.26)	92.9	(1.75)	92.4	(3.85)	92.9	(1.78)
Louisiana	91.4	(1.44)	92.8	(4.38)	91.3	(1.45)	89.8	(2.62)	‡	(†)	90.0	(2.60)
Maine	95.8	(0.72)	‡	(†)	95.8	(0.73)	93.8	(0.86)	‡	(†)	94.1	(0.88)
Maryland	96.4	(0.55)	95.3	(1.97)	96.5	(0.55)	93.5	(1.51)	96.5	(2.18)	93.3	(1.56)
Massachusetts	94.6	(1.25)	97.2	(0.80)	94.3	(1.37)	94.6	(1.05)	97.1	(1.15)	94.4	(1.11)
Michigan	87.8	(1.63)	81.9	(4.59)	88.3	(1.59)	83.1	(2.12)	94.3	(2.94)	82.5	(2.21)
Minnesota	97.0	(0.73)	97.9	(1.55)	96.9	(0.78)	94.2	(1.38)	95.1	(2.10)	94.1	(1.48)
Mississippi	89.0	(2.11)	‡	(†)	89.1	(2.09)	91.8	(1.81)	‡	(†)	92.0	(1.75)
Missouri	93.7	(1.15)	87.3	(8.31)	93.9	(1.10)	92.5	(1.43)	89.5	(5.14)	92.5	(1.44)
Montana	97.6	(0.55)	98.9	(1.22)	97.6	(0.55)	97.7	(0.45)	‡	(†)	97.6	(0.47)
Nebraska	99.0	(0.50)	100.0 ¹	(†)	99.0	(0.54)	99.4	(0.35)	98.6	(1.02)	99.5	(0.34)
Nevada	96.0	(0.87)	95.9	(1.32)	96.0	(0.91)	89.5	(1.54)	89.6	(2.35)	89.4	(1.47)
New Hampshire	97.5	(0.58)	92.9	(4.75)	97.6	(0.58)	97.0	(0.77)	90.6	(4.28)	97.2	(0.75)
New Jersey	97.6	(0.78)	89.4	(6.37)	97.9	(0.71)	99.1	(0.44)	‡	(†)	99.3	(0.36)
New Mexico	95.1	(0.69)	92.4	(2.02)	95.6	(0.73)	93.2	(1.13)	91.0	(2.93)	93.6	(1.15)
New York	93.1	(1.13)	88.5	(2.40)	93.5	(1.19)	94.8	(0.99)	87.0	(3.92)	95.3	(1.01)
North Carolina	97.0	(0.96)	96.8	(1.07)	97.0	(1.00)	95.1	(1.04)	95.4	(2.02)	95.1	(1.04)
North Dakota	85.9	(0.55)	‡	(†)	86.1	(0.56)	90.1	(0.50)	‡	(†)	90.0	(0.51)
Ohio	70.7	(3.27)	56.6	(10.20)	71.1	(3.25)	63.6	(3.05)	50.1	(7.79)	64.1	(3.05)
Oklahoma	97.6	(0.86)	96.8	(2.47)	97.6	(0.80)	96.3	(1.01)	97.0	(1.42)	96.2	(1.02)
Oregon	93.9	(1.28)	91.7	(3.20)	94.2	(1.25)	91.7	(1.78)	87.3	(4.87)	92.4	(1.63)
Pennsylvania	93.5	(1.29)	92.0	(4.90)	93.6	(1.26)	91.5	(2.08)	93.8	(2.73)	91.4	(2.12)
Rhode Island	97.4	(0.50)	97.4	(1.54)	97.4	(0.50)	96.8	(0.54)	98.5	(1.10)	96.7	(0.57)
South Carolina	93.9	(1.45)	93.6	(3.17)	93.9	(1.46)	93.6	(1.06)	92.5	(2.32)	93.7	(1.09)
South Dakota	91.7	(0.77)	93.7	(4.09)	91.6	(0.76)	88.4	(0.96)	78.9	(5.85)	88.7	(0.95)
Tennessee	97.5	(0.92)	95.2	(1.27)	97.5	(0.95)	96.2	(1.21)	97.5	(1.73)	96.1	(1.23)
Texas	93.1	(1.14)	86.7	(3.02)	94.9	(1.08)	91.6	(1.37)	88.2	(3.08)	92.5	(1.46)
Utah	93.8	(1.25)	93.6	(2.94)	93.8	(1.28)	93.9	(1.22)	87.5	(5.14)	94.1	(1.18)

See notes at end of table.

TABLE A-25. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015—Continued

State	(Standard errors in parentheses)								
	2013				2015				
	Total	English language learner (ELL) status		Total	English language learner (ELL) status				
ELL		Not ELL	ELL		Not ELL				
Vermont	95.0 (0.38)	‡ (†)	94.9 (0.39)	94.0 (0.46)	‡ (†)	94.2 (0.45)			
Virginia	94.1 (1.06)	87.8 (3.37)	94.6 (1.05)	96.1 (0.77)	93.4 (2.57)	96.3 (0.78)			
Washington	93.9 (1.48)	84.9 (6.89)	94.8 (1.23)	87.1 (2.13)	83.2 (5.39)	87.7 (2.00)			
West Virginia	88.5 (1.60)	‡ (†)	88.5 (1.59)	86.3 (1.72)	‡ (†)	86.4 (1.72)			
Wisconsin	88.3 (1.71)	82.4 (4.10)	88.8 (1.68)	84.3 (2.05)	82.4 (4.94)	84.5 (2.04)			
Wyoming	97.4 (0.24)	96.0 (0.97)	97.4 (0.24)	95.8 (0.33)	‡ (†)	95.8 (0.32)			
Department of Defense Dependents Schools	95.1 (0.22)	97.1 (1.42)	95.0 (0.23)	95.3 (0.24)	94.9 (1.32)	95.3 (0.26)			

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-26. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and jurisdiction: 2013 and 2015

Jurisdiction	(Standard errors in parentheses)								
	2013				2015				
	Total	English language learner (ELL) status		Total	English language learner (ELL) status				
ELL		Not ELL	ELL		Not ELL				
Nation (public)	93.8 (0.27)	91.7 (0.95)	94.0 (0.25)	92.0 (0.31)	90.4 (1.07)	92.2 (0.31)			
Large city	92.4 (0.69)	90.9 (1.68)	92.7 (0.68)	90.2 (0.82)	88.8 (1.86)	90.5 (0.78)			
Albuquerque	97.0 (0.68)	97.7 (1.21)	96.9 (0.67)	94.6 (1.25)	93.5 (2.27)	94.9 (1.31)			
Atlanta	94.4 (0.27)	‡ (†)	94.3 (0.27)	95.9 (1.11)	‡ (†)	96.1 (1.08)			
Austin	92.7 (1.11)	89.3 (2.20)	94.2 (1.17)	94.3 (1.70)	92.1 (2.79)	95.5 (1.53)			
Baltimore City	85.5 (2.52)	‡ (†)	85.7 (2.50)	82.7 (3.11)	‡ (†)	82.6 (3.15)			
Boston	94.5 (0.28)	93.6 (0.62)	95.0 (0.41)	93.3 (1.26)	96.2 (1.09)	91.9 (1.56)			
Charlotte	95.7 (0.92)	95.2 (2.24)	95.7 (0.92)	96.3 (1.13)	95.8 (2.00)	96.4 (1.18)			
Chicago	95.7 (1.30)	98.2 (1.17)	95.3 (1.45)	93.6 (1.68)	92.0 (3.37)	93.9 (1.70)			
Cleveland	64.8 (0.79)	63.8 (4.57)	64.9 (0.94)	67.0 (1.01)	‡ (†)	66.3 (1.02)			
Dallas	94.6 (1.57)	93.3 (2.48)	95.6 (1.56)	86.6 (3.91)	83.5 (5.59)	89.4 (4.54)			
Detroit	86.5 (2.55)	95.7 (2.23)	84.6 (2.73)	86.1 (2.80)	95.7 (3.66)	84.2 (3.24)			
District of Columbia (DCPS)	85.5 (0.70)	88.4 (3.35)	85.2 (0.75)	79.9 (0.72)	71.5 (4.95)	80.5 (0.76)			
Fresno	98.3 (0.56)	97.3 (1.40)	98.7 (0.38)	93.2 (1.46)	91.5 (2.33)	93.8 (1.49)			
Hillsborough County (FL)	98.2 (0.84)	97.5 (1.41)	98.2 (0.82)	97.5 (1.21)	94.3 (4.50)	97.8 (0.98)			
Houston	91.8 (1.41)	90.5 (2.26)	92.6 (1.34)	93.2 (1.58)	88.8 (2.77)	96.0 (1.23)			
Jefferson County (KY)	89.4 (1.66)	‡ (†)	89.3 (1.67)	91.1 (2.42)	93.0 (4.00)	90.9 (2.42)			
Los Angeles	97.6 (0.99)	97.9 (0.92)	97.4 (1.16)	96.3 (1.26)	96.6 (1.96)	96.2 (1.45)			
Miami-Dade	98.6 (0.75)	97.3 (1.78)	98.9 (0.57)	96.5 (1.15)	95.3 (2.31)	96.8 (1.08)			
Milwaukee	87.7 (1.65)	77.7 (6.90)	89.3 (1.62)	— (†)	— (†)	— (†)			
New York City	91.3 (1.45)	85.6 (2.97)	92.3 (1.54)	89.8 (2.00)	86.9 (3.85)	90.1 (2.10)			
Philadelphia	94.0 (1.81)	97.8 (2.18)	93.7 (1.92)	95.4 (1.61)	94.7 (3.28)	95.5 (1.62)			
San Diego	97.6 (1.25)	95.3 (2.55)	98.7 (0.66)	91.7 (1.95)	89.6 (2.73)	92.9 (2.07)			
Duval County (FL)	— (†)	— (†)	— (†)	91.5 (2.36)	‡ (†)	91.4 (2.42)			

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-27. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)								
School characteristic	2013				2015			
	Total	National School Lunch Program (NSLP) status		Not NSLP eligible	Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible	
Nation (public)	93.8 (0.27)	93.2 (0.35)	94.4 (0.30)	92.0 (0.31)	91.3 (0.43)	92.9 (0.38)		
Location								
City	93.2 (0.41)	92.3 (0.51)	95.0 (0.56)	91.2 (0.59)	90.6 (0.67)	92.5 (0.98)		
Suburban	94.0 (0.46)	93.5 (0.66)	94.2 (0.49)	92.3 (0.54)	91.1 (0.88)	93.2 (0.54)		
Town	93.7 (0.71)	93.9 (0.82)	93.5 (0.83)	92.6 (0.65)	92.5 (0.76)	92.8 (0.74)		
Rural	94.3 (0.58)	94.0 (0.73)	94.5 (0.56)	92.4 (0.59)	92.3 (0.89)	92.6 (0.64)		
Minority enrollment								
75 percent or more	93.0 (0.56)	92.5 (0.63)	95.6 (0.64)	90.7 (0.82)	90.5 (0.89)	91.8 (1.27)		
Less than 75 percent	94.1 (0.31)	93.7 (0.39)	94.3 (0.32)	92.5 (0.34)	92.0 (0.41)	93.0 (0.39)		

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-28. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015

(Standard errors in parentheses)								
State	2013				2015			
	Total	National School Lunch Program (NSLP) status		Not NSLP eligible	Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible	
Nation (public)	93.8 (0.27)	93.2 (0.35)	94.4 (0.30)	92.0 (0.31)	91.3 (0.43)	92.9 (0.38)		
Alabama	99.4 (0.44)	99.3 (0.58)	99.7 (0.26)	99.7 (0.21)	99.5 (0.34)	100.0 ¹ (†)		
Alaska	92.1 (0.93)	89.2 (1.56)	95.1 (0.91)	91.2 (1.45)	92.6 (1.80)	90.3 (1.80)		
Arizona	89.0 (1.62)	86.7 (2.26)	91.7 (1.60)	89.5 (1.82)	90.2 (2.01)	90.8 (2.36)		
Arkansas	96.9 (0.67)	96.5 (0.80)	97.5 (0.65)	95.1 (1.61)	93.8 (1.97)	97.8 (1.15)		
California	97.3 (0.89)	96.9 (1.09)	98.0 (1.10)	94.2 (1.49)	92.5 (2.06)	96.8 (1.15)		
Colorado	92.9 (1.79)	91.3 (2.65)	94.1 (1.95)	90.6 (1.80)	88.8 (2.72)	92.0 (1.90)		
Connecticut	98.1 (0.71)	96.9 (1.55)	98.9 (0.51)	97.1 (0.91)	94.3 (1.92)	98.7 (0.51)		
Delaware	94.9 (0.90)	93.5 (1.34)	96.6 (0.66)	96.3 (0.62)	95.0 (1.03)	97.1 (0.57)		
District of Columbia	75.5 (0.64)	73.4 (0.86)	83.0 (1.78)	71.4 (0.75)	68.6 (0.94)	79.2 (1.26)		
Florida	95.9 (0.82)	96.0 (0.72)	95.6 (1.27)	92.0 (1.65)	91.5 (1.91)	92.8 (1.61)		
Georgia	98.5 (0.79)	98.4 (0.82)	98.5 (0.79)	97.6 (0.76)	97.0 (1.08)	98.3 (0.85)		
Hawaii	98.4 (0.42)	98.2 (0.50)	98.6 (0.46)	99.0 (0.40)	98.6 (0.60)	99.4 (0.29)		
Idaho	92.5 (1.22)	92.4 (1.13)	92.6 (1.59)	90.5 (1.48)	89.3 (1.76)	91.8 (1.55)		
Illinois	98.3 (0.54)	97.6 (0.78)	99.0 (0.50)	97.6 (0.68)	96.6 (0.89)	99.0 (0.58)		
Indiana	87.0 (1.92)	86.6 (2.22)	87.4 (2.10)	82.7 (2.14)	83.7 (2.66)	81.5 (2.29)		
Iowa	88.8 (2.05)	88.0 (2.38)	89.4 (2.24)	88.9 (1.59)	88.6 (1.87)	89.2 (1.70)		
Kansas	92.8 (1.27)	91.9 (1.62)	93.7 (1.25)	93.5 (1.55)	91.6 (1.96)	95.9 (1.45)		
Kentucky	93.1 (1.26)	92.8 (1.31)	93.5 (1.41)	92.9 (1.75)	93.6 (1.59)	91.8 (2.28)		
Louisiana	91.4 (1.44)	89.4 (1.84)	95.8 (1.23)	89.8 (2.62)	89.2 (2.85)	91.1 (2.73)		
Maine	95.8 (0.72)	95.7 (0.89)	95.9 (0.75)	93.8 (0.86)	93.4 (1.16)	94.1 (1.02)		
Maryland	96.4 (0.55)	93.1 (1.02)	98.5 (0.41)	93.5 (1.51)	92.0 (1.77)	95.4 (1.57)		
Massachusetts	94.6 (1.25)	96.8 (0.78)	93.1 (1.83)	94.6 (1.05)	93.5 (1.32)	95.4 (1.30)		
Michigan	87.8 (1.63)	86.0 (2.05)	90.0 (1.65)	83.1 (2.12)	81.5 (2.47)	84.4 (2.36)		
Minnesota	97.0 (0.73)	96.9 (0.99)	97.0 (0.84)	94.2 (1.38)	94.5 (1.39)	94.0 (1.52)		
Mississippi	89.0 (2.11)	88.4 (2.37)	90.8 (2.35)	91.8 (1.81)	91.0 (2.29)	94.2 (1.95)		

See notes at end of table.

TABLE A-28. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015—Continued

(Standard errors in parentheses)										
State	2013					2015				
	Total	National School Lunch Program (NSLP) status			Total	National School Lunch Program (NSLP) status				
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible			
Missouri	93.7 (1.15)	93.5 (1.38)	94.0 (1.32)		92.5 (1.43)	91.2 (1.92)	93.9 (1.52)			
Montana	97.6 (0.55)	97.5 (0.93)	97.7 (0.49)		97.7 (0.45)	97.1 (0.83)	98.2 (0.41)			
Nebraska	99.0 (0.50)	99.4 (0.41)	98.8 (0.65)		99.4 (0.35)	99.2 (0.49)	99.6 (0.28)			
Nevada	96.0 (0.87)	95.7 (0.97)	96.4 (1.02)		89.5 (1.54)	86.1 (2.34)	94.3 (1.07)			
New Hampshire	97.5 (0.58)	97.3 (0.88)	97.6 (0.64)		97.0 (0.77)	95.4 (1.43)	98.1 (0.54)			
New Jersey	97.6 (0.78)	96.8 (1.31)	98.2 (0.75)		99.1 (0.44)	98.6 (0.69)	99.4 (0.44)			
New Mexico	95.1 (0.69)	94.7 (0.89)	96.0 (1.06)		93.2 (1.13)	93.3 (1.42)	93.1 (1.65)			
New York	93.1 (1.13)	91.7 (1.53)	94.5 (1.37)		94.8 (0.99)	93.0 (1.30)	96.8 (1.24)			
North Carolina	97.0 (0.96)	96.8 (1.02)	97.5 (1.04)		95.1 (1.04)	94.6 (1.23)	95.8 (1.64)			
North Dakota	85.9 (0.55)	85.8 (0.94)	85.9 (0.65)		90.1 (0.50)	89.5 (0.96)	90.3 (0.69)			
Ohio	70.7 (3.27)	74.0 (4.12)	67.9 (3.79)		63.6 (3.05)	62.4 (4.01)	64.3 (3.51)			
Oklahoma	97.6 (0.86)	97.0 (1.14)	98.4 (0.69)		96.3 (1.01)	96.5 (1.13)	95.9 (1.37)			
Oregon	93.9 (1.28)	94.0 (1.52)	94.1 (1.29)		91.7 (1.78)	91.8 (2.06)	91.8 (2.24)			
Pennsylvania	93.5 (1.29)	92.3 (2.03)	94.5 (1.32)		91.5 (2.08)	88.9 (3.23)	94.2 (1.57)			
Rhode Island	97.4 (0.50)	97.4 (0.60)	97.3 (0.56)		96.8 (0.54)	96.5 (0.82)	97.1 (0.56)			
South Carolina	93.9 (1.45)	93.7 (1.70)	94.3 (1.56)		93.6 (1.06)	92.0 (1.46)	96.3 (1.11)			
South Dakota	91.7 (0.77)	92.1 (1.07)	91.5 (0.87)		88.4 (0.96)	87.3 (1.39)	90.0 (1.07)			
Tennessee	97.5 (0.92)	97.0 (1.24)	98.1 (0.67)		96.2 (1.21)	96.3 (1.42)	96.0 (1.59)			
Texas	93.1 (1.14)	91.2 (1.58)	96.0 (1.09)		91.6 (1.37)	91.5 (1.62)	91.8 (2.14)			
Utah	93.8 (1.25)	93.6 (1.42)	94.0 (1.45)		93.9 (1.22)	94.1 (1.80)	93.5 (1.38)			
Vermont	95.0 (0.38)	95.3 (0.63)	94.7 (0.46)		94.0 (0.46)	92.6 (0.97)	95.0 (0.58)			
Virginia	94.1 (1.06)	93.9 (1.05)	94.3 (1.30)		96.1 (0.77)	96.8 (0.74)	95.7 (0.95)			
Washington	93.9 (1.48)	91.3 (2.46)	96.0 (1.14)		87.1 (2.13)	86.2 (3.20)	88.2 (1.98)			
West Virginia	88.5 (1.60)	87.3 (1.92)	92.1 (1.70)		86.3 (1.72)	84.6 (2.08)	91.1 (2.06)			
Wisconsin	88.3 (1.71)	87.7 (1.79)	88.8 (2.00)		84.3 (2.05)	84.1 (2.26)	84.3 (2.38)			
Wyoming	97.4 (0.24)	96.6 (0.42)	97.8 (0.31)		95.8 (0.33)	96.4 (0.51)	95.4 (0.50)			
Department of Defense Dependents Schools	95.1 (0.22)	‡ (†)	‡ (†)		95.3 (0.24)	‡ (†)	‡ (†)			

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-29. Percentage of 4th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)												
Jurisdiction	2013					2015						
	Total	National School Lunch Program (NSLP) status			Total	National School Lunch Program (NSLP) status						
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible					
Nation (public)	93.8	(0.27)	93.2	(0.35)	94.4	(0.30)	92.0	(0.31)	91.3	(0.43)	92.9	(0.38)
Large city	92.4	(0.69)	91.5	(0.80)	94.7	(0.91)	90.2	(0.82)	89.6	(0.97)	92.1	(1.22)
Albuquerque	97.0	(0.68)	97.3	(0.84)	96.3	(0.90)	94.6	(1.25)	94.9	(1.34)	93.9	(2.11)
Atlanta	94.4	(0.27)	93.8	(0.38)	95.8	(0.64)	95.9	(1.11)	96.2	(1.24)	95.1	(1.43)
Austin	92.7	(1.11)	92.6	(1.38)	92.7	(1.38)	94.3	(1.70)	91.8	(2.54)	98.4	(0.94)
Baltimore City	85.5	(2.52)	84.6	(2.69)	90.9	(3.08)	82.7	(3.11)	81.3	(3.38)	90.4	(3.65)
Boston	94.5	(0.28)	95.2	(0.38)	90.1	(1.82)	93.3	(1.26)	93.3	(1.26)	†	(†)
Charlotte	95.7	(0.92)	93.5	(1.41)	98.6	(0.57)	96.3	(1.13)	96.9	(1.11)	95.1	(2.00)
Chicago	95.7	(1.30)	96.0	(1.27)	94.4	(3.01)	93.6	(1.68)	93.3	(1.73)	97.4	(1.59)
Cleveland	64.8	(0.79)	64.8	(0.79)	‡	(†)	67.0	(1.01)	67.0	(1.01)	‡	(†)
Dallas	94.6	(1.57)	94.4	(1.62)	97.7	(1.67)	86.6	(3.91)	85.5	(4.11)	95.7	(2.50)
Detroit	86.5	(2.55)	87.8	(2.46)	88.8	(4.44)	86.1	(2.80)	87.7	(2.74)	81.3	(4.11)
District of Columbia (DCPS)	85.5	(0.70)	82.4	(0.85)	96.7	(1.22)	79.9	(0.72)	77.2	(0.94)	86.4	(1.24)
Fresno	98.3	(0.56)	98.1	(0.62)	100.0 ¹	(†)	93.2	(1.46)	92.6	(1.54)	100.0 ¹	(†)
Hillsborough County (FL)	98.2	(0.84)	98.1	(0.99)	98.3	(0.99)	97.5	(1.21)	96.9	(1.80)	98.2	(1.11)
Houston	91.8	(1.41)	91.4	(1.74)	93.7	(2.30)	93.2	(1.58)	93.1	(1.63)	94.1	(2.34)
Jefferson County (KY)	89.4	(1.66)	88.2	(2.02)	91.6	(1.86)	91.1	(2.42)	91.9	(2.37)	89.4	(3.62)
Los Angeles	97.6	(0.99)	97.8	(0.89)	98.5	(1.43)	96.3	(1.26)	96.6	(1.27)	94.5	(4.56)
Miami-Dade	98.6	(0.75)	98.2	(0.98)	99.8	(0.26)	96.5	(1.15)	96.2	(1.32)	97.2	(1.33)
Milwaukee	87.7	(1.65)	87.7	(1.72)	87.6	(3.44)	—	(†)	—	(†)	—	(†)
New York City	91.3	(1.45)	91.5	(1.44)	90.7	(3.86)	89.8	(2.00)	90.1	(2.03)	88.4	(4.04)
Philadelphia	94.0	(1.81)	93.6	(1.94)	99.3	(0.66)	95.4	(1.61)	95.0	(1.64)	96.7	(1.66)
San Diego	97.6	(1.25)	96.3	(1.90)	100.0 ¹	(†)	91.7	(1.95)	89.0	(2.61)	97.5	(1.51)
Duval County (FL)	—	(†)	—	(†)	—	(†)	91.5	(2.36)	91.4	(2.83)	91.7	(2.69)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-30. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)													
2013													
School characteristic	Total	Race/ethnicity											
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Nation (public)	91.8 (0.33)	92.2 (0.35)	88.7 (0.75)	91.9 (0.67)	94.4 (0.60)	94.3 (0.93)	90.9 (1.42)	92.7 (0.83)					
Location													
City	88.9 (0.66)	89.9 (0.79)	84.0 (1.30)	90.3 (0.94)	92.4 (1.20)	96.0 (1.22)	93.1 (2.06)	91.2 (1.47)					
Suburban	93.2 (0.55)	93.2 (0.60)	91.8 (1.07)	93.2 (1.35)	96.4 (0.51)	91.9 (1.58)	95.0 (2.18)	94.6 (0.88)					
Town	91.2 (0.86)	90.6 (0.96)	92.7 (1.59)	93.2 (2.03)	88.3 (3.43)	93.2 (2.71)	88.9 (3.48)	91.1 (2.45)					
Rural	93.0 (0.75)	93.1 (0.80)	92.4 (1.50)	92.6 (1.71)	96.4 (0.82)	96.0 (1.30)	88.8 (2.08)	92.3 (1.68)					
Minority enrollment													
75 percent or more	88.5 (0.95)	89.9 (1.62)	83.8 (1.42)	90.3 (1.16)	93.8 (1.31)	92.7 (1.23)	84.8 (3.67)	89.8 (3.02)					
Less than 75 percent	92.8 (0.35)	92.3 (0.37)	93.0 (0.67)	93.9 (0.63)	94.7 (0.66)	95.6 (1.33)	93.5 (1.07)	93.1 (0.81)					
2015													
School characteristic	Total	Race/ethnicity											
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Nation (public)	89.6 (0.53)	91.1 (0.41)	85.5 (1.16)	87.9 (1.40)	93.9 (0.89)	87.2 (5.01)	90.0 (1.65)	90.6 (0.87)					
Location													
City	87.7 (1.30)	93.0 (0.62)	82.7 (1.98)	84.7 (2.78)	94.9 (1.26)	75.6 (13.74)	90.8 (1.77)	92.1 (1.39)					
Suburban	91.2 (0.77)	91.8 (0.53)	87.7 (1.38)	91.4 (2.31)	93.3 (1.33)	92.6 (1.56)	90.9 (2.54)	89.4 (1.39)					
Town	89.1 (1.39)	89.1 (1.21)	84.2 (6.23)	91.0 (2.16)	95.5 (1.92)	96.0 (2.17)	84.6 (5.67)	90.5 (1.92)					
Rural	89.2 (1.28)	89.8 (1.19)	89.7 (1.63)	83.9 (4.82)	92.0 (2.92)	92.0 (3.46)	93.0 (1.33)	90.8 (1.72)					
Minority enrollment													
75 percent or more	83.5 (1.74)	88.1 (1.72)	79.7 (2.10)	83.9 (2.39)	91.9 (2.02)	80.1 (9.89)	83.1 (4.97)	83.0 (3.76)					
Less than 75 percent	91.7 (0.38)	91.2 (0.43)	91.8 (0.75)	92.9 (0.68)	95.0 (0.70)	93.8 (2.16)	92.8 (1.07)	91.6 (0.82)					

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification." SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-31. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015

(Standard errors in parentheses)																
2013																
State	Total	Race/ethnicity								Pacific Islander		American Indian/ Alaska Native		Two or more races		
		White	Black	Hispanic	Asian											
Nation (public)	91.8	(0.33)	92.2	(0.35)	88.7	(0.75)	91.9	(0.67)	94.4	(0.60)	94.3	(0.93)	90.9	(1.42)	92.7	(0.83)
Alabama	91.6	(1.74)	96.1	(1.07)	83.1	(3.93)	89.0	(4.59)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Alaska	94.9	(0.73)	97.0	(0.50)	95.0	(2.17)	98.2	(1.03)	94.3	(1.73)	91.5	(3.51)	89.5	(2.78)	96.0	(1.41)
Arizona	86.6	(2.06)	85.9	(2.37)	86.9	(4.67)	86.5	(2.96)	87.6	(4.80)	‡	(†)	88.3	(5.34)	‡	(†)
Arkansas	93.0	(1.37)	94.9	(1.40)	86.2	(2.94)	96.0	(1.49)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
California	96.9	(0.87)	97.0	(1.42)	95.9	(1.78)	96.8	(0.84)	97.4	(1.12)	‡	(†)	‡	(†)	99.3	(0.73)
Colorado	91.1	(1.62)	94.3	(1.17)	90.5	(3.59)	85.2	(3.53)	93.3	(3.21)	‡	(†)	‡	(†)	90.1	(3.27)
Connecticut	92.8	(1.78)	94.7	(1.35)	89.5	(4.55)	87.6	(5.59)	92.7	(3.48)	‡	(†)	‡	(†)	‡	(†)
Delaware	95.0	(0.38)	97.3	(0.39)	91.3	(0.97)	94.1	(1.27)	97.1	(1.97)	‡	(†)	‡	(†)	‡	(†)
District of Columbia	62.5	(0.84)	76.8	(3.91)	58.0	(1.10)	78.3	(3.48)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	92.8	(1.43)	93.4	(2.08)	92.7	(1.60)	91.8	(1.61)	92.7	(2.71)	‡	(†)	‡	(†)	94.2	(3.11)
Georgia	95.2	(1.27)	99.3	(0.42)	91.8	(2.55)	88.9	(4.30)	95.5	(2.49)	‡	(†)	‡	(†)	97.8	(1.54)
Hawaii	93.5	(0.70)	93.7	(0.95)	‡	(†)	90.8	(2.40)	96.5	(0.69)	91.1	(1.27)	‡	(†)	96.1	(1.80)
Idaho	91.9	(0.72)	91.6	(0.84)	‡	(†)	93.5	(1.30)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Illinois	99.4	(0.44)	99.5	(0.42)	99.1	(0.77)	99.7	(0.20)	98.2	(1.20)	‡	(†)	‡	(†)	98.7	(1.32)
Indiana	86.3	(2.27)	87.0	(2.38)	81.5	(8.01)	85.1	(4.21)	‡	(†)	‡	(†)	‡	(†)	87.6	(4.03)
Iowa	89.7	(1.64)	90.2	(1.85)	84.9	(3.12)	88.2	(2.44)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Kansas	92.5	(1.36)	92.7	(1.53)	91.2	(4.22)	93.0	(1.90)	94.3	(3.35)	‡	(†)	‡	(†)	88.3	(3.18)
Kentucky	90.1	(1.72)	90.3	(1.87)	88.7	(2.52)	88.1	(3.55)	100.0 ¹	(†)	‡	(†)	‡	(†)	85.9	(4.59)
Louisiana	88.3	(1.99)	90.4	(2.27)	85.3	(3.12)	91.7	(3.35)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maine	93.2	(1.33)	93.2	(1.42)	93.5	(3.05)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maryland	94.2	(0.99)	96.2	(1.24)	90.4	(1.47)	93.7	(1.94)	97.8	(1.27)	‡	(†)	‡	(†)	96.0	(2.05)
Massachusetts	84.6	(2.08)	86.4	(2.05)	78.0	(5.04)	78.9	(6.57)	87.0	(3.27)	‡	(†)	‡	(†)	87.7	(5.22)
Michigan	81.2	(3.06)	81.3	(3.39)	77.1	(7.38)	82.8	(4.19)	85.8	(5.51)	‡	(†)	‡	(†)	‡	(†)
Minnesota	96.4	(1.10)	95.5	(1.38)	99.0	(0.76)	98.2	(1.09)	98.7	(1.40)	‡	(†)	‡	(†)	‡	(†)
Mississippi	94.7	(1.25)	97.2	(0.99)	91.5	(2.20)	97.5	(1.73)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Missouri	94.9	(1.23)	94.6	(1.41)	95.6	(2.13)	94.0	(3.25)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Montana	98.0	(0.50)	98.4	(0.47)	‡	(†)	97.1	(1.81)	‡	(†)	‡	(†)	95.8	(1.31)	‡	(†)
Nebraska	98.5	(0.50)	98.7	(0.46)	98.8	(1.01)	97.9	(0.66)	96.9	(3.28)	‡	(†)	‡	(†)	97.6	(2.56)
Nevada	90.3	(1.20)	95.2	(0.75)	82.1	(5.06)	86.7	(1.77)	96.4	(1.37)	‡	(†)	‡	(†)	91.8	(2.59)
New Hampshire	95.9	(0.94)	96.1	(0.79)	‡	(†)	97.4	(2.26)	87.4	(7.07)	‡	(†)	‡	(†)	‡	(†)
New Jersey	97.5	(1.00)	98.4	(0.92)	94.1	(3.62)	97.1	(1.25)	99.0	(0.90)	‡	(†)	‡	(†)	‡	(†)
New Mexico	92.7	(1.44)	94.5	(1.43)	96.4	(2.58)	94.0	(1.18)	‡	(†)	‡	(†)	76.9	(9.30)	‡	(†)
New York	90.5	(1.80)	93.4	(2.50)	85.0	(4.16)	87.7	(2.50)	89.8	(2.81)	‡	(†)	‡	(†)	‡	(†)
North Carolina	91.2	(1.90)	94.0	(1.99)	86.8	(3.29)	90.8	(2.02)	83.1	(8.68)	‡	(†)	‡	(†)	91.6	(2.67)
North Dakota	85.0	(0.46)	84.1	(0.53)	91.2	(2.91)	‡	(†)	‡	(†)	‡	(†)	89.5	(1.65)	‡	(†)
Ohio	72.9	(3.71)	74.4	(3.91)	61.8	(8.41)	80.8	(5.04)	‡	(†)	‡	(†)	‡	(†)	75.0	(6.56)
Oklahoma	94.5	(1.46)	95.8	(1.41)	94.2	(2.41)	85.6	(5.90)	‡	(†)	‡	(†)	96.3	(1.27)	95.7	(3.45)
Oregon	95.0	(1.48)	95.1	(1.44)	‡	(†)	92.9	(2.99)	97.8	(1.54)	‡	(†)	‡	(†)	97.9	(2.01)

See notes at end of table.

TABLE A-31. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)																
2013																
State	Total		Race/ethnicity								Pacific Islander		American Indian/Alaska Native		Two or more races	
			White	Black	Hispanic	Asian										
Pennsylvania	92.3	(1.63)	93.6	(2.02)	81.4	(2.68)	96.8	(1.85)	98.2	(1.07)	‡	(†)	‡	(†)	‡	(†)
Rhode Island	94.8	(0.39)	95.3	(0.48)	93.2	(2.02)	94.1	(1.25)	95.3	(2.69)	‡	(†)	‡	(†)	‡	(†)
South Carolina	94.6	(1.48)	95.1	(1.98)	93.8	(1.88)	94.8	(2.25)	‡	(†)	‡	(†)	‡	(†)	93.6	(3.10)
South Dakota	85.4	(1.14)	86.5	(0.79)	‡	(†)	84.2	(3.91)	‡	(†)	‡	(†)	76.5	(6.06)	‡	(†)
Tennessee	95.3	(1.69)	96.0	(1.60)	93.7	(4.27)	92.0	(3.07)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Texas	90.9	(1.96)	93.8	(2.18)	92.7	(2.39)	87.8	(2.81)	95.9	(2.05)	‡	(†)	‡	(†)	96.9	(3.03)
Utah	87.6	(1.49)	87.7	(1.33)	‡	(†)	88.0	(2.55)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Vermont	88.2	(0.42)	88.2	(0.43)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Virginia	91.0	(1.42)	93.4	(1.31)	85.2	(3.13)	87.6	(3.08)	92.4	(2.48)	‡	(†)	‡	(†)	93.8	(2.60)
Washington	90.1	(1.59)	90.5	(1.71)	92.0	(2.80)	90.7	(2.55)	81.9	(4.85)	‡	(†)	‡	(†)	89.7	(2.75)
West Virginia	91.5	(1.37)	91.3	(1.42)	93.3	(2.56)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Wisconsin	89.8	(1.73)	89.9	(1.83)	90.6	(1.91)	89.4	(3.12)	92.5	(3.03)	‡	(†)	‡	(†)	‡	(†)
Wyoming	95.1	(0.33)	95.1	(0.36)	‡	(†)	93.8	(1.13)	‡	(†)	‡	(†)	97.6	(1.63)	‡	(†)
Department of Defense Dependents Schools	94.5	(0.38)	95.0	(0.61)	96.9	(1.04)	92.0	(0.99)	90.4	(1.98)	‡	(†)	‡	(†)	96.5	(0.96)
2015																
State	Total		Race/ethnicity								Pacific Islander		American Indian/Alaska Native		Two or more races	
			White	Black	Hispanic	Asian										
Nation (public)	89.6	(0.53)	91.1	(0.41)	85.5	(1.16)	87.9	(1.40)	93.9	(1.40)	87.2	(5.01)	90.0	(1.65)	90.6	(0.87)
Alabama	96.3	(1.51)	98.7	(0.69)	91.2	(4.18)	95.5	(2.90)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Alaska	95.1	(0.64)	96.4	(0.73)	‡	(†)	94.1	(2.14)	90.0	(2.58)	‡	(†)	95.0	(1.57)	94.2	(2.07)
Arizona	78.4	(2.94)	81.1	(3.69)	82.1	(5.48)	75.8	(3.52)	‡	(†)	‡	(†)	69.9	(13.48)	‡	(†)
Arkansas	93.4	(1.35)	95.2	(1.11)	88.5	(3.15)	92.6	(2.58)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
California	89.9	(2.00)	94.8	(2.15)	78.9	(6.57)	88.1	(2.64)	93.2	(2.40)	‡	(†)	‡	(†)	91.4	(5.76)
Colorado	87.5	(2.63)	91.7	(2.19)	82.0	(7.80)	82.1	(4.61)	88.4	(6.47)	‡	(†)	‡	(†)	86.8	(5.73)
Connecticut	95.4	(1.36)	97.0	(0.92)	91.4	(4.06)	92.4	(2.95)	98.0	(1.50)	‡	(†)	‡	(†)	‡	(†)
Delaware	95.8	(0.29)	96.9	(0.44)	94.1	(0.59)	94.7	(1.19)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
District of Columbia	58.7	(0.80)	83.6	(2.94)	53.0	(1.05)	67.4	(2.80)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	91.3	(1.72)	94.2	(1.57)	87.5	(2.52)	89.2	(2.78)	97.9	(0.66)	‡	(†)	‡	(†)	91.5	(3.81)
Georgia	93.3	(1.91)	95.9	(1.56)	90.0	(3.35)	93.4	(2.56)	93.4	(3.21)	‡	(†)	‡	(†)	92.1	(3.65)
Hawaii	92.7	(0.54)	87.0	(2.67)	‡	(†)	92.1	(2.89)	95.5	(0.93)	91.2	(1.12)	‡	(†)	95.1	(1.82)
Idaho	82.6	(1.88)	82.9	(2.11)	‡	(†)	80.3	(3.77)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Illinois	96.3	(1.63)	94.7	(2.66)	97.3	(1.51)	98.7	(0.75)	96.5	(2.22)	‡	(†)	‡	(†)	‡	(†)
Indiana	81.1	(3.34)	80.8	(3.46)	80.4	(8.80)	79.8	(7.37)	‡	(†)	‡	(†)	‡	(†)	85.1	(4.83)
Iowa	91.0	(1.74)	90.2	(1.96)	93.3	(3.38)	95.2	(1.79)	93.9	(3.31)	‡	(†)	‡	(†)	‡	(†)
Kansas	94.4	(1.56)	94.5	(1.67)	86.9	(6.00)	96.1	(1.51)	‡	(†)	‡	(†)	‡	(†)	96.2	(2.32)
Kentucky	91.8	(1.31)	92.5	(1.40)	87.3	(2.14)	87.4	(2.88)	‡	(†)	‡	(†)	‡	(†)	91.6	(4.59)
Louisiana	78.3	(3.41)	81.7	(3.94)	74.0	(4.35)	77.1	(7.14)	‡	(†)	‡	(†)	‡	(†)	‡	(†)

See notes at end of table.

TABLE A-31. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)													
State	2015												
	Total	Race/ethnicity								Pacific Islander	American Indian/ Alaska Native	Two or more races	
		White	Black	Hispanic	Asian								
Maine	95.5 (0.82)	95.4 (0.87)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Maryland	94.8 (0.90)	97.8 (0.75)	89.9 (1.73)	94.1 (1.85)	99.7 (0.15)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.3 (2.37)	‡ (†)
Massachusetts	80.1 (2.40)	79.7 (2.80)	85.3 (3.64)	76.4 (3.77)	85.0 (4.34)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Michigan	88.2 (2.97)	93.4 (2.38)	64.3 (10.19)	88.4 (4.91)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Minnesota	96.0 (1.40)	95.9 (1.59)	98.4 (1.23)	92.5 (3.66)	96.5 (2.22)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)
Mississippi	94.6 (1.55)	94.1 (1.90)	95.2 (2.06)	92.1 (3.67)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Missouri	90.6 (2.26)	90.0 (2.52)	95.8 (1.45)	88.2 (4.12)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Montana	95.7 (0.83)	96.4 (0.77)	‡ (†)	88.8 (4.07)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.2 (3.49)	‡ (†)	‡ (†)	‡ (†)
Nebraska	98.8 (0.22)	99.4 (0.20)	96.3 (1.33)	97.0 (0.98)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	100.0 ¹	‡ (†)
Nevada	88.2 (1.23)	92.3 (1.69)	87.8 (2.42)	84.8 (1.51)	89.4 (2.57)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	88.4 (3.04)	‡ (†)
New Hampshire	96.8 (1.08)	97.7 (0.72)	‡ (†)	91.4 (3.35)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
New Jersey	98.4 (0.71)	99.3 (0.55)	95.0 (2.92)	97.6 (1.20)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
New Mexico	91.6 (1.27)	91.7 (1.77)	‡ (†)	91.2 (1.31)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	92.5 (4.74)	‡ (†)	‡ (†)	‡ (†)
New York	88.9 (2.26)	94.0 (2.14)	73.8 (7.51)	88.0 (2.62)	91.8 (2.89)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
North Carolina	90.8 (1.61)	92.1 (1.66)	89.3 (2.65)	87.6 (3.17)	93.3 (3.81)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	87.0 (6.13)	‡ (†)	96.3 (2.08)	‡ (†)
North Dakota	83.6 (0.56)	84.6 (0.67)	88.1 (3.49)	85.5 (4.49)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	73.6 (2.11)	‡ (†)	‡ (†)	‡ (†)
Ohio	61.9 (3.35)	62.0 (3.65)	57.4 (6.92)	78.4 (6.65)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	54.7 (7.66)	‡ (†)
Oklahoma	89.9 (2.46)	91.9 (2.55)	83.2 (5.15)	82.0 (6.49)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	93.2 (2.19)	‡ (†)	86.2 (5.24)	‡ (†)
Oregon	90.9 (1.77)	90.8 (1.88)	‡ (†)	92.6 (2.16)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	92.5 (3.93)	‡ (†)
Pennsylvania	94.4 (1.86)	95.4 (2.14)	90.2 (5.19)	91.5 (4.43)	100.0 ¹	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.7 (4.24)	‡ (†)
Rhode Island	97.2 (0.24)	99.4 (0.17)	97.1 (1.29)	89.9 (1.10)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
South Carolina	93.2 (1.28)	95.5 (1.36)	89.7 (1.90)	94.6 (2.38)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
South Dakota	86.1 (1.13)	87.2 (1.29)	‡ (†)	89.6 (3.18)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	74.3 (3.34)	‡ (†)	‡ (†)	‡ (†)
Tennessee	94.3 (2.28)	98.0 (0.89)	80.7 (9.84)	93.6 (3.45)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Texas	88.8 (3.26)	92.4 (3.58)	87.5 (6.95)	86.0 (5.00)	95.3 (2.50)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	99.6 (0.24)	‡ (†)
Utah	90.8 (1.29)	92.0 (1.31)	‡ (†)	86.6 (3.38)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Vermont	88.2 (0.47)	87.9 (0.54)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Virginia	93.9 (1.15)	94.2 (1.19)	91.3 (2.72)	93.8 (2.10)	98.5 (1.07)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.2 (2.36)	‡ (†)
Washington	91.6 (1.67)	93.6 (1.58)	93.7 (3.78)	87.5 (3.68)	93.1 (2.39)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	84.0 (8.14)	‡ (†)	90.9 (3.51)	‡ (†)
West Virginia	83.6 (2.75)	83.9 (2.72)	73.0 (7.87)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Wisconsin	87.1 (2.66)	85.7 (2.98)	95.6 (1.66)	89.3 (4.00)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	77.6 (6.40)	‡ (†)	‡ (†)	‡ (†)
Wyoming	96.2 (0.34)	96.2 (0.42)	‡ (†)	94.9 (1.29)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Department of Defense Dependents Schools	94.7 (0.42)	96.0 (0.94)	94.4 (1.99)	91.9 (1.58)	94.8 (2.31)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.4 (1.64)	‡ (†)

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-32. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015

(Standard errors in parentheses)														
2013														
Jurisdiction	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	91.8 (0.33)	92.2 (0.35)	88.7 (0.75)	91.9 (0.67)	94.4 (0.60)	94.3 (0.93)	90.9 (1.42)	92.7 (0.83)						
Large city	88.4 (0.84)	90.2 (1.42)	83.6 (1.60)	89.1 (0.99)	93.7 (1.21)	94.2 (2.12)	93.6 (1.85)	91.4 (2.36)						
Albuquerque	94.5 (0.68)	96.4 (1.34)	† (†)	93.4 (0.96)	† (†)	† (†)	† (†)	† (†)						
Atlanta	93.1 (0.35)	90.0 (2.35)	93.5 (0.47)	† (†)	† (†)	† (†)	† (†)	† (†)						
Austin	91.7 (0.79)	94.4 (1.29)	89.9 (3.40)	90.1 (1.04)	† (†)	† (†)	† (†)	† (†)						
Baltimore City	81.9 (3.54)	82.0 (10.75)	81.9 (3.41)	† (†)	† (†)	† (†)	† (†)	† (†)						
Boston	96.1 (0.26)	99.1 (0.61)	94.6 (0.71)	95.5 (0.70)	98.6 (0.97)	† (†)	† (†)	† (†)						
Charlotte	78.7 (1.07)	84.3 (1.46)	74.7 (1.76)	76.2 (2.90)	83.2 (4.88)	† (†)	† (†)	† (†)						
Chicago	99.4 (0.39)	98.0 (2.11)	99.8 (0.18)	99.4 (0.45)	98.7 (1.29)	† (†)	† (†)	† (†)						
Cleveland	74.0 (0.74)	71.7 (2.60)	74.5 (1.14)	68.9 (3.43)	† (†)	† (†)	† (†)	† (†)						
Dallas	86.9 (0.77)	† (†)	85.2 (2.04)	87.1 (1.08)	† (†)	† (†)	† (†)	† (†)						
Detroit	84.7 (1.24)	† (†)	82.1 (1.50)	100.0 ¹ (†)	† (†)	† (†)	† (†)	† (†)						
District of Columbia (DCPS)	81.6 (1.14)	100.0 ¹ (†)	76.8 (1.59)	89.0 (3.03)	† (†)	† (†)	† (†)	† (†)						
Fresno	93.7 (0.59)	97.2 (1.42)	89.7 (2.70)	93.5 (0.81)	93.8 (1.68)	† (†)	† (†)	† (†)						
Hillsborough County (FL)	93.6 (1.54)	96.2 (1.20)	90.1 (2.84)	91.3 (2.33)	† (†)	† (†)	† (†)	† (†)						
Houston	92.1 (0.97)	93.4 (1.57)	91.4 (1.95)	91.9 (0.95)	† (†)	† (†)	† (†)	† (†)						
Jefferson County (KY)	92.8 (0.58)	94.8 (0.85)	90.7 (1.28)	88.2 (3.50)	† (†)	† (†)	† (†)	† (†)						
Los Angeles	93.2 (1.21)	98.2 (1.19)	93.4 (3.69)	91.8 (1.32)	98.7 (1.04)	† (†)	† (†)	† (†)						
Miami-Dade	91.8 (1.96)	92.3 (2.99)	85.5 (4.62)	93.7 (1.82)	† (†)	† (†)	† (†)	† (†)						
Milwaukee	91.1 (1.80)	97.6 (1.80)	88.3 (2.07)	95.3 (2.85)	† (†)	† (†)	† (†)	† (†)						
New York City	84.0 (3.42)	87.7 (4.99)	81.7 (6.01)	83.4 (3.77)	86.4 (4.01)	† (†)	† (†)	† (†)						
Philadelphia	92.5 (2.91)	98.4 (1.58)	90.0 (4.32)	93.2 (4.65)	97.4 (2.53)	† (†)	† (†)	† (†)						
San Diego	97.8 (1.49)	99.1 (0.59)	92.8 (5.83)	97.8 (1.37)	98.9 (1.00)	† (†)	† (†)	† (†)						
Duval County (FL)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)						
2015														
Jurisdiction	Total	Race/ethnicity										Two or more races		
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native							
Nation (public)	89.6 (0.53)	91.1 (0.41)	85.5 (1.16)	87.9 (1.40)	93.9 (0.89)	87.2 (5.01)	90.0 (1.65)	90.6 (0.87)						
Large city	83.6 (2.02)	92.1 (1.00)	78.4 (2.61)	81.1 (3.92)	92.5 (2.21)	70.4 (19.49)	90.9 (3.36)	88.0 (3.13)						
Albuquerque	85.0 (1.95)	80.5 (4.69)	† (†)	86.4 (1.73)	† (†)	† (†)	† (†)	† (†)						
Atlanta	86.5 (0.66)	82.0 (3.26)	87.3 (0.61)	84.1 (4.26)	† (†)	† (†)	† (†)	† (†)						
Austin	89.0 (0.94)	93.9 (1.39)	80.5 (4.80)	87.1 (1.29)	† (†)	† (†)	† (†)	† (†)						
Baltimore City	77.9 (4.79)	94.1 (3.04)	76.2 (5.08)	76.4 (13.65)	† (†)	† (†)	† (†)	† (†)						
Boston	86.9 (0.82)	93.2 (1.78)	82.7 (1.73)	88.6 (1.72)	84.6 (3.02)	† (†)	† (†)	† (†)						
Charlotte	84.3 (2.51)	92.6 (2.12)	81.8 (1.91)	73.7 (7.46)	91.9 (3.42)	† (†)	† (†)	† (†)						
Chicago	97.0 (1.60)	100.0 ¹ (†)	95.2 (2.98)	98.0 (1.62)	† (†)	† (†)	† (†)	† (†)						
Cleveland	67.6 (1.11)	78.0 (3.40)	63.7 (1.70)	71.4 (3.38)	† (†)	† (†)	† (†)	† (†)						

See notes at end of table.

TABLE A-32. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)																
Jurisdiction	2015															
	Total		Race/ethnicity								Pacific Islander		American Indian/ Alaska Native		Two or more races	
			White		Black		Hispanic		Asian							
Dallas	87.1	(1.30)	‡	(†)	91.3	(2.31)	86.3	(1.62)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Detroit	81.1	(0.67)	‡	(†)	81.0	(0.78)	75.6	(1.74)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
District of Columbia (DCPS)	72.2	(1.25)	100.0 ¹	(†)	62.3	(1.75)	90.1	(2.75)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Fresno	92.9	(0.71)	97.8	(1.42)	‡	(†)	91.9	(0.98)	94.2	(2.80)	‡	(†)	‡	(†)	‡	(†)
Hillsborough County (FL)	86.0	(1.49)	89.1	(2.47)	83.1	(3.15)	83.2	(2.70)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Houston	89.5	(1.11)	100.0 ¹	(†)	91.7	(2.03)	86.7	(1.71)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
Jefferson County (KY)	86.1	(0.93)	90.2	(1.26)	81.2	(2.05)	76.9	(5.01)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Los Angeles	93.0	(1.96)	94.9	(2.56)	94.9	(3.69)	92.5	(2.11)	93.8	(3.82)	‡	(†)	‡	(†)	‡	(†)
Miami-Dade	94.3	(2.01)	99.0	(0.99)	84.4	(6.71)	96.0	(1.85)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Milwaukee	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)	—	(†)
New York City	84.9	(2.69)	92.5	(4.76)	78.6	(3.00)	84.1	(3.37)	88.8	(4.25)	‡	(†)	‡	(†)	‡	(†)
Philadelphia	99.0	(0.58)	100.0 ¹	(†)	99.3	(0.55)	96.0	(2.44)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
San Diego	91.9	(0.80)	87.1	(2.49)	‡	(†)	91.6	(1.46)	98.7	(0.87)	‡	(†)	‡	(†)	‡	(†)
Duval County (FL)	87.2	(1.32)	92.8	(1.30)	81.6	(3.01)	87.6	(3.81)	‡	(†)	‡	(†)	‡	(†)	‡	(†)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-33. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)												
School characteristic	2013				2015							
	Total	Disability status		Total	Disability status							
		With a disability	Without a disability		With a disability	Without a disability						
Nation (public)	91.8	(0.33)	91.4	(0.43)	91.8	(0.34)	89.6	(0.53)	88.7	(0.65)	89.7	(0.54)
Location												
City	88.9	(0.66)	86.9	(1.16)	89.2	(0.64)	87.7	(1.30)	86.0	(1.46)	87.9	(1.36)
Suburban	93.2	(0.55)	93.6	(0.53)	93.2	(0.58)	91.2	(0.77)	91.0	(0.86)	91.3	(0.82)
Town	91.2	(0.86)	90.6	(1.26)	91.3	(0.86)	89.1	(1.39)	85.7	(2.29)	89.5	(1.34)
Rural	93.0	(0.75)	93.5	(0.79)	93.0	(0.79)	89.2	(1.28)	89.5	(1.46)	89.2	(1.30)
Minority enrollment												
75 percent or more	88.5	(0.95)	87.6	(1.29)	88.6	(0.97)	83.5	(1.74)	81.2	(1.99)	83.8	(1.78)
Less than 75 percent	92.8	(0.35)	92.5	(0.46)	92.8	(0.36)	91.7	(0.38)	91.2	(0.54)	91.8	(0.39)

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-34. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015

(Standard errors in parentheses)												
State	2013				2015							
	Total	Disability status		Total	Disability status							
		With a disability	Without a disability		With a disability	Without a disability						
Nation (public)	91.8	(0.33)	91.4	(0.43)	91.8	(0.34)	89.6	(0.53)	88.7	(0.65)	89.7	(0.54)
Alabama	91.6	(1.74)	89.6	(3.53)	91.8	(1.69)	96.3	(1.51)	97.8	(1.31)	96.1	(1.57)
Alaska	94.9	(0.73)	97.2	(1.06)	94.5	(0.82)	95.1	(0.64)	93.7	(1.94)	95.2	(0.58)
Arizona	86.6	(2.06)	88.5	(2.98)	86.4	(2.09)	78.4	(2.94)	76.3	(4.06)	78.7	(3.06)
Arkansas	93.0	(1.37)	89.7	(2.08)	93.4	(1.39)	93.4	(1.35)	95.4	(1.79)	93.2	(1.40)
California	96.9	(0.87)	96.2	(1.40)	96.9	(0.91)	89.9	(2.00)	89.1	(2.87)	90.0	(2.08)
Colorado	91.1	(1.62)	90.5	(2.64)	91.1	(1.63)	87.5	(2.63)	89.7	(3.28)	87.3	(2.67)
Connecticut	92.8	(1.78)	94.3	(1.95)	92.6	(1.82)	95.4	(1.36)	95.8	(1.63)	95.4	(1.37)
Delaware	95.0	(0.38)	94.4	(0.90)	95.1	(0.40)	95.8	(0.29)	96.2	(0.89)	95.7	(0.40)
District of Columbia	62.5	(0.84)	50.9	(3.62)	64.6	(1.10)	58.7	(0.80)	49.9	(3.14)	60.4	(0.81)
Florida	92.8	(1.43)	92.9	(2.05)	92.8	(1.40)	91.3	(1.72)	90.7	(2.37)	91.4	(1.72)
Georgia	95.2	(1.27)	95.4	(2.03)	95.2	(1.26)	93.3	(1.91)	93.4	(2.63)	93.2	(1.97)
Hawaii	93.5	(0.70)	92.4	(1.82)	93.6	(0.75)	92.7	(0.54)	92.0	(1.75)	92.8	(0.56)
Idaho	91.9	(0.72)	93.5	(1.45)	91.8	(0.76)	82.6	(1.88)	81.6	(3.74)	82.7	(1.84)
Illinois	99.4	(0.44)	97.7	(1.43)	99.6	(0.31)	96.3	(1.63)	97.4	(1.40)	96.1	(1.77)
Indiana	86.3	(2.27)	88.0	(2.63)	86.0	(2.40)	81.1	(3.34)	76.3	(4.29)	81.7	(3.33)
Iowa	89.7	(1.64)	89.6	(2.39)	89.7	(1.64)	91.0	(1.74)	90.4	(2.66)	91.1	(1.74)
Kansas	92.5	(1.36)	89.4	(2.60)	92.9	(1.35)	94.4	(1.56)	94.9	(1.84)	94.3	(1.62)
Kentucky	90.1	(1.72)	87.5	(2.99)	90.4	(1.76)	91.8	(1.31)	91.3	(2.10)	91.9	(1.35)
Louisiana	88.3	(1.99)	84.2	(2.89)	88.9	(2.01)	78.3	(3.41)	76.0	(5.07)	78.8	(3.50)
Maine	93.2	(1.33)	90.9	(1.97)	93.7	(1.30)	95.5	(0.82)	96.6	(1.16)	95.3	(0.91)
Maryland	94.2	(0.99)	92.4	(2.60)	94.4	(0.93)	94.8	(0.90)	92.5	(1.71)	95.2	(0.91)
Massachusetts	84.6	(2.08)	83.0	(3.18)	84.9	(2.07)	80.1	(2.40)	79.9	(3.11)	80.1	(2.53)
Michigan	81.2	(3.06)	80.2	(3.72)	81.4	(3.14)	88.2	(2.97)	86.0	(3.76)	88.4	(2.96)
Minnesota	96.4	(1.10)	97.8	(1.12)	96.2	(1.14)	96.0	(1.40)	96.8	(1.52)	95.9	(1.46)
Mississippi	94.7	(1.25)	92.3	(3.27)	94.9	(1.24)	94.6	(1.55)	96.9	(1.50)	94.3	(1.65)

See notes at end of table.

TABLE A-34. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015—Continued

(Standard errors in parentheses)								
State	2013				2015			
	Total	Disability status		Total	Disability status			
		With a disability	Without a disability		With a disability	Without a disability		
Missouri	94.9 (1.23)	95.1 (1.79)	94.9 (1.30)	90.6 (2.26)	92.5 (2.67)	90.3 (2.27)		
Montana	98.0 (0.50)	98.3 (1.13)	98.0 (0.51)	95.7 (0.83)	97.8 (1.06)	95.5 (0.92)		
Nebraska	98.5 (0.50)	99.0 (0.82)	98.5 (0.50)	98.8 (0.22)	98.4 (0.78)	98.9 (0.23)		
Nevada	90.3 (1.20)	83.1 (2.56)	91.1 (1.20)	88.2 (1.23)	84.2 (3.07)	88.6 (1.19)		
New Hampshire	95.9 (0.94)	95.7 (1.05)	96.0 (1.00)	96.8 (1.08)	96.4 (1.19)	96.9 (1.17)		
New Jersey	97.5 (1.00)	96.6 (1.35)	97.7 (1.00)	98.4 (0.71)	97.8 (1.17)	98.5 (0.75)		
New Mexico	92.7 (1.44)	90.3 (3.01)	93.0 (1.32)	91.6 (1.27)	88.7 (3.05)	91.9 (1.21)		
New York	90.5 (1.80)	90.0 (1.89)	90.5 (1.91)	88.9 (2.26)	88.6 (3.05)	89.0 (2.25)		
North Carolina	91.2 (1.90)	92.1 (1.90)	91.1 (1.96)	90.8 (1.61)	91.5 (2.27)	90.7 (1.67)		
North Dakota	85.0 (0.46)	88.0 (1.55)	84.6 (0.59)	83.6 (0.56)	81.3 (2.15)	83.9 (0.61)		
Ohio	72.9 (3.71)	75.2 (4.26)	72.6 (3.80)	61.9 (3.35)	57.6 (4.82)	62.5 (3.47)		
Oklahoma	94.5 (1.46)	95.8 (2.23)	94.3 (1.45)	89.9 (2.46)	92.6 (2.28)	89.4 (2.70)		
Oregon	95.0 (1.48)	94.9 (1.93)	95.0 (1.48)	90.9 (1.77)	92.1 (2.38)	90.7 (1.82)		
Pennsylvania	92.3 (1.63)	90.0 (2.45)	92.7 (1.60)	94.4 (1.86)	94.5 (2.38)	94.3 (1.88)		
Rhode Island	94.8 (0.39)	94.1 (1.39)	94.9 (0.42)	97.2 (0.24)	95.9 (1.04)	97.5 (0.29)		
South Carolina	94.6 (1.48)	97.2 (1.06)	94.3 (1.60)	93.2 (1.28)	94.5 (1.66)	93.1 (1.38)		
South Dakota	85.4 (1.14)	84.1 (2.42)	85.5 (1.15)	86.1 (1.13)	84.3 (2.99)	86.3 (1.11)		
Tennessee	95.3 (1.69)	96.6 (1.43)	95.2 (1.78)	94.3 (2.28)	90.3 (5.20)	94.8 (1.92)		
Texas	90.9 (1.96)	91.9 (1.73)	90.7 (2.06)	88.8 (3.26)	84.8 (4.38)	89.2 (3.21)		
Utah	87.6 (1.49)	92.2 (2.14)	87.2 (1.51)	90.8 (1.29)	95.1 (1.73)	90.3 (1.37)		
Vermont	88.2 (0.42)	90.0 (1.66)	87.8 (0.48)	88.2 (0.47)	87.8 (1.91)	88.3 (0.60)		
Virginia	91.0 (1.42)	95.1 (1.35)	90.5 (1.51)	93.9 (1.15)	92.7 (2.43)	94.1 (1.20)		
Washington	90.1 (1.59)	90.9 (1.94)	90.0 (1.69)	91.6 (1.67)	93.7 (2.13)	91.4 (1.83)		
West Virginia	91.5 (1.37)	89.3 (2.60)	91.8 (1.37)	83.6 (2.75)	82.9 (3.74)	83.7 (2.86)		
Wisconsin	89.8 (1.73)	90.2 (2.09)	89.7 (1.82)	87.1 (2.66)	85.9 (3.41)	87.2 (2.67)		
Wyoming	95.1 (0.33)	96.5 (0.88)	94.8 (0.34)	96.2 (0.34)	97.4 (1.06)	96.0 (0.37)		
Department of Defense Dependents Schools	94.5 (0.38)	96.8 (1.34)	94.2 (0.40)	94.7 (0.42)	96.0 (1.91)	94.6 (0.43)		

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-35. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)								
Jurisdiction	2013				2015			
	Total	Disability status		Total	Disability status			
		With a disability	Without a disability		With a disability	Without a disability		
Nation (public)	91.8 (0.33)	91.4 (0.43)	91.8 (0.34)	89.6 (0.53)	88.7 (0.65)	89.7 (0.54)		
Large city	88.4 (0.84)	86.0 (1.47)	88.7 (0.83)	83.6 (2.02)	81.0 (2.04)	84.0 (2.14)		
Albuquerque	94.5 (0.68)	96.1 (1.98)	94.3 (0.65)	85.0 (1.95)	81.7 (5.51)	85.5 (1.75)		
Atlanta	93.1 (0.35)	90.5 (2.64)	93.4 (0.38)	86.5 (0.66)	85.0 (2.38)	86.7 (0.78)		
Austin	91.7 (0.79)	92.0 (2.13)	91.6 (0.86)	89.0 (0.94)	84.1 (2.42)	89.8 (0.99)		
Baltimore City	81.9 (3.54)	90.6 (3.20)	80.3 (3.78)	77.9 (4.79)	78.3 (5.15)	77.8 (5.04)		
Boston	96.1 (0.26)	97.0 (0.80)	95.9 (0.30)	86.9 (0.82)	90.9 (2.20)	86.1 (1.09)		
Charlotte	78.7 (1.07)	80.0 (3.26)	78.6 (1.09)	84.3 (2.51)	76.5 (5.57)	85.1 (2.47)		
Chicago	99.4 (0.39)	99.0 (0.73)	99.5 (0.39)	97.0 (1.60)	98.4 (1.16)	96.8 (1.74)		
Cleveland	74.0 (0.74)	72.5 (3.03)	74.4 (0.99)	67.6 (1.11)	69.6 (3.22)	67.1 (1.21)		

See notes at end of table.

TABLE A-35. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)									
Jurisdiction	2013					2015			
	Total	Disability status		Total	Disability status				
		With a disability	Without a disability		With a disability	Without a disability			
Dallas	86.9 (0.77)	83.4 (3.82)	87.2 (0.87)	87.1 (1.30)	† (†)	87.4 (1.31)			
Detroit	84.7 (1.24)	85.7 (3.54)	84.5 (1.19)	81.1 (0.67)	79.1 (4.21)	81.5 (0.78)			
District of Columbia (DCPS)	81.6 (1.14)	66.0 (4.95)	84.2 (1.44)	72.2 (1.25)	62.8 (4.61)	73.9 (1.22)			
Fresno	93.7 (0.59)	84.1 (4.55)	94.4 (0.57)	92.9 (0.71)	‡ (†)	93.7 (0.73)			
Hillsborough County (FL)	93.6 (1.54)	95.5 (1.85)	93.2 (1.57)	86.0 (1.49)	82.1 (3.59)	86.7 (1.50)			
Houston	92.1 (0.97)	85.6 (2.83)	92.7 (0.91)	89.5 (1.11)	88.5 (2.72)	89.6 (1.24)			
Jefferson County (KY)	92.8 (0.58)	90.1 (2.66)	93.1 (0.64)	86.1 (0.93)	73.3 (3.50)	87.6 (0.91)			
Los Angeles	93.2 (1.21)	92.9 (2.09)	93.2 (1.25)	93.0 (1.96)	90.1 (3.25)	93.4 (2.08)			
Miami-Dade	91.8 (1.96)	92.6 (3.09)	91.7 (1.96)	94.3 (2.01)	95.4 (2.94)	94.2 (2.01)			
Milwaukee	91.1 (1.80)	93.6 (2.15)	90.4 (1.87)	— (†)	— (†)	— (†)			
New York City	84.0 (3.42)	83.6 (3.36)	84.0 (3.78)	84.9 (2.69)	84.3 (3.91)	84.9 (2.95)			
Philadelphia	92.5 (2.91)	90.4 (3.61)	92.9 (3.00)	99.0 (0.58)	98.0 (1.54)	99.2 (0.54)			
San Diego	97.8 (1.49)	96.1 (1.66)	98.0 (1.60)	91.9 (0.80)	90.0 (2.92)	92.1 (0.81)			
Duval County (FL)	— (†)	— (†)	— (†)	87.2 (1.32)	84.1 (3.68)	87.5 (1.34)			

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-36. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)									
School characteristic	2013					2015			
	Total	English language learner (ELL) status		Total	English language learner (ELL) status				
		ELL	Not ELL		ELL	Not ELL			
Nation (public)	91.8 (0.33)	90.1 (0.95)	91.8 (0.33)	89.6 (0.53)	88.2 (1.19)	89.7 (0.51)			
Location									
City	88.9 (0.66)	88.4 (1.25)	89.0 (0.67)	87.7 (1.30)	86.7 (1.98)	87.8 (1.31)			
Suburban	93.2 (0.55)	91.3 (2.07)	93.3 (0.55)	91.2 (0.77)	90.4 (2.38)	91.3 (0.71)			
Town	91.2 (0.86)	91.8 (2.71)	91.2 (0.84)	89.1 (1.39)	90.6 (2.54)	89.0 (1.42)			
Rural	93.0 (0.75)	91.9 (1.78)	93.0 (0.76)	89.2 (1.28)	84.5 (3.74)	89.3 (1.25)			
Minority enrollment									
75 percent or more	88.5 (0.95)	88.7 (1.51)	88.5 (0.98)	83.5 (1.74)	85.6 (1.89)	83.2 (1.82)			
Less than 75 percent	92.8 (0.35)	92.1 (0.95)	92.8 (0.35)	91.7 (0.38)	92.2 (1.16)	91.7 (0.38)			

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-37. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015

State	(Standard errors in parentheses)									
	2013					2015				
	Total	English language learner (ELL) status				Total	English language learner (ELL) status			
		ELL	Not ELL	ELL	Not ELL					
Nation (public)	91.8 (0.33)	90.1 (0.95)	91.8 (0.33)	89.6 (0.53)	88.2 (1.19)	89.7 (0.51)				
Alabama	91.6 (1.74)	‡ (†)	91.7 (1.73)	96.3 (1.51)	‡ (†)	96.2 (1.53)				
Alaska	94.9 (0.73)	86.4 (4.22)	95.9 (0.54)	95.1 (0.64)	95.0 (2.26)	95.0 (0.60)				
Arizona	86.6 (2.06)	‡ (†)	86.7 (2.06)	78.4 (2.94)	79.4 (6.64)	78.4 (2.96)				
Arkansas	93.0 (1.37)	97.3 (1.39)	92.7 (1.49)	93.4 (1.35)	91.1 (3.09)	93.6 (1.34)				
California	96.9 (0.87)	95.7 (1.32)	97.0 (0.88)	89.9 (2.00)	86.4 (3.29)	90.5 (1.90)				
Colorado	91.1 (1.62)	80.3 (6.06)	91.9 (1.42)	87.5 (2.63)	77.7 (7.98)	88.8 (2.32)				
Connecticut	92.8 (1.78)	78.0 (14.27)	93.3 (1.64)	95.4 (1.36)	‡ (†)	95.5 (1.32)				
Delaware	95.0 (0.38)	‡ (†)	95.3 (0.36)	95.8 (0.29)	‡ (†)	95.8 (0.30)				
District of Columbia	62.5 (0.84)	‡ (†)	61.9 (0.89)	58.7 (0.80)	‡ (†)	58.4 (0.82)				
Florida	92.8 (1.43)	88.1 (3.29)	93.0 (1.41)	91.3 (1.72)	82.2 (5.71)	91.9 (1.61)				
Georgia	95.2 (1.27)	87.2 (4.81)	95.4 (1.26)	93.3 (1.91)	95.5 (2.98)	93.2 (1.93)				
Hawaii	93.5 (0.70)	91.7 (2.09)	93.7 (0.64)	92.7 (0.54)	93.1 (2.46)	92.7 (0.56)				
Idaho	91.9 (0.72)	93.8 (2.64)	91.9 (0.74)	82.6 (1.88)	‡ (†)	82.7 (1.88)				
Illinois	99.4 (0.44)	98.8 (0.82)	99.4 (0.46)	96.3 (1.63)	96.7 (2.10)	96.2 (1.67)				
Indiana	86.3 (2.27)	‡ (†)	86.4 (2.25)	81.1 (3.34)	76.1 (11.42)	81.3 (3.23)				
Iowa	89.7 (1.64)	90.9 (3.68)	89.7 (1.67)	91.0 (1.74)	95.5 (2.30)	90.8 (1.78)				
Kansas	92.5 (1.36)	94.7 (2.08)	92.3 (1.45)	94.4 (1.56)	97.4 (1.50)	94.0 (1.68)				
Kentucky	90.1 (1.72)	88.1 (2.77)	90.1 (1.75)	91.8 (1.31)	‡ (†)	91.9 (1.33)				
Louisiana	88.3 (1.99)	‡ (†)	88.2 (2.01)	78.3 (3.41)	‡ (†)	78.3 (3.38)				
Maine	93.2 (1.33)	‡ (†)	93.3 (1.35)	95.5 (0.82)	‡ (†)	95.6 (0.79)				
Maryland	94.2 (0.99)	92.4 (2.93)	94.2 (1.01)	94.8 (0.90)	95.6 (2.17)	94.8 (0.91)				
Massachusetts	84.6 (2.08)	78.5 (7.45)	84.9 (2.09)	80.1 (2.40)	86.7 (3.38)	79.7 (2.52)				
Michigan	81.2 (3.06)	69.3 (10.62)	81.6 (3.09)	88.2 (2.97)	94.3 (3.56)	88.0 (3.04)				
Minnesota	96.4 (1.10)	97.5 (2.50)	96.3 (1.12)	96.0 (1.40)	93.8 (3.45)	96.2 (1.36)				
Mississippi	94.7 (1.25)	‡ (†)	94.6 (1.26)	94.6 (1.55)	‡ (†)	94.7 (1.54)				
Missouri	94.9 (1.23)	‡ (†)	95.0 (1.22)	90.6 (2.26)	‡ (†)	90.6 (2.23)				
Montana	98.0 (0.50)	‡ (†)	98.1 (0.51)	95.7 (0.83)	‡ (†)	95.7 (0.82)				
Nebraska	98.5 (0.50)	98.4 (1.60)	98.6 (0.52)	98.8 (0.22)	‡ (†)	98.8 (0.23)				
Nevada	90.3 (1.20)	81.5 (3.58)	91.0 (1.12)	88.2 (1.23)	82.2 (2.62)	89.1 (1.17)				
New Hampshire	95.9 (0.94)	‡ (†)	95.9 (0.95)	96.8 (1.08)	‡ (†)	96.8 (1.09)				
New Jersey	97.5 (1.00)	‡ (†)	97.5 (1.02)	98.4 (0.71)	‡ (†)	98.5 (0.68)				
New Mexico	92.7 (1.44)	85.2 (2.58)	93.8 (1.40)	91.6 (1.27)	90.5 (2.81)	91.7 (1.25)				
New York	90.5 (1.80)	83.7 (4.87)	90.9 (1.86)	88.9 (2.26)	87.3 (4.62)	89.0 (2.29)				
North Carolina	91.2 (1.90)	89.5 (2.86)	91.3 (1.93)	90.8 (1.61)	92.6 (2.90)	90.7 (1.62)				
North Dakota	85.0 (0.46)	‡ (†)	84.9 (0.46)	83.6 (0.56)	‡ (†)	83.6 (0.58)				
Ohio	72.9 (3.71)	79.8 (6.98)	72.8 (3.73)	61.9 (3.35)	86.8 (12.81)	61.2 (3.39)				
Oklahoma	94.5 (1.46)	82.5 (7.36)	95.0 (1.38)	89.9 (2.46)	84.5 (12.71)	90.1 (2.34)				
Oregon	95.0 (1.48)	92.9 (3.44)	95.1 (1.44)	90.9 (1.77)	‡ (†)	90.8 (1.77)				
Pennsylvania	92.3 (1.63)	95.8 (2.63)	92.2 (1.64)	94.4 (1.86)	97.7 (1.96)	94.3 (1.89)				
Rhode Island	94.8 (0.39)	92.0 (2.37)	94.9 (0.39)	97.2 (0.24)	91.8 (2.75)	97.5 (0.28)				
South Carolina	94.6 (1.48)	95.7 (2.59)	94.5 (1.50)	93.2 (1.28)	92.1 (3.45)	93.3 (1.24)				
South Dakota	85.4 (1.14)	‡ (†)	85.2 (1.24)	86.1 (1.13)	‡ (†)	85.9 (1.14)				
Tennessee	95.3 (1.69)	‡ (†)	95.4 (1.67)	94.3 (2.28)	‡ (†)	94.2 (2.30)				
Texas	90.9 (1.96)	85.5 (4.63)	91.3 (1.92)	88.8 (3.26)	90.3 (2.81)	88.6 (3.40)				
Utah	87.6 (1.49)	90.1 (4.47)	87.6 (1.43)	90.8 (1.29)	77.1 (6.41)	91.2 (1.25)				
Vermont	88.2 (0.42)	‡ (†)	88.0 (0.42)	88.2 (0.47)	‡ (†)	88.1 (0.48)				
Virginia	91.0 (1.42)	92.9 (2.88)	90.9 (1.43)	93.9 (1.15)	94.9 (3.18)	93.8 (1.20)				
Washington	90.1 (1.59)	82.9 (5.51)	90.4 (1.58)	91.6 (1.67)	89.3 (4.40)	91.8 (1.61)				
West Virginia	91.5 (1.37)	‡ (†)	91.6 (1.35)	83.6 (2.75)	‡ (†)	83.5 (2.76)				
Wisconsin	89.8 (1.73)	92.2 (2.64)	89.6 (1.79)	87.1 (2.66)	85.0 (6.00)	87.1 (2.67)				
Wyoming	95.1 (0.33)	‡ (†)	95.0 (0.35)	96.2 (0.34)	‡ (†)	96.2 (0.36)				
Department of Defense Dependents Schools	94.5 (0.38)	92.9 (3.06)	94.5 (0.38)	94.7 (0.42)	92.2 (3.38)	94.9 (0.47)				

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-38. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by English language learner status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)												
Jurisdiction	2013					2015						
	Total	English language learner (ELL) status			Total	English language learner (ELL) status						
		ELL	Not ELL	ELL		Not ELL						
Nation (public)	91.8	(0.33)	90.1	(0.95)	91.8	(0.33)	89.6	(0.53)	88.2	(1.19)	89.7	(0.51)
Large city	88.4	(0.84)	86.8	(1.53)	88.6	(0.85)	83.6	(2.02)	83.1	(2.84)	83.7	(2.07)
Albuquerque	94.5	(0.68)	89.8	(2.23)	95.2	(0.65)	85.0	(1.95)	86.2	(2.99)	84.8	(2.14)
Atlanta	93.1	(0.35)	‡	(†)	92.9	(0.35)	86.5	(0.66)	‡	(†)	86.4	(0.66)
Austin	91.7	(0.79)	86.0	(3.09)	92.6	(0.74)	89.0	(0.94)	85.9	(2.78)	89.5	(0.89)
Baltimore City	81.9	(3.54)	‡	(†)	82.2	(3.50)	77.9	(4.79)	‡	(†)	78.1	(4.73)
Boston	96.1	(0.26)	94.9	(1.03)	96.4	(0.34)	86.9	(0.82)	82.5	(2.85)	88.1	(1.13)
Charlotte	78.7	(1.07)	76.1	(4.42)	78.9	(1.12)	84.3	(2.51)	‡	(†)	84.4	(2.64)
Chicago	99.4	(0.39)	98.6	(1.33)	99.5	(0.41)	97.0	(1.60)	93.1	(5.31)	97.3	(1.53)
Cleveland	74.0	(0.74)	‡	(†)	73.9	(0.81)	67.6	(1.11)	‡	(†)	66.5	(1.25)
Dallas	86.9	(0.77)	82.6	(1.91)	88.1	(0.92)	87.1	(1.30)	82.5	(2.99)	89.4	(1.48)
Detroit	84.7	(1.24)	100.0 ¹	(†)	82.0	(1.43)	81.1	(0.67)	79.3	(2.02)	81.6	(0.78)
District of Columbia (DCPS)	81.6	(1.14)	‡	(†)	81.5	(1.27)	72.2	(1.25)	‡	(†)	71.9	(1.27)
Fresno	93.7	(0.59)	88.6	(2.13)	94.6	(0.65)	92.9	(0.71)	87.6	(3.37)	93.9	(0.72)
Hillsborough County (FL)	93.6	(1.54)	91.4	(3.15)	93.8	(1.64)	86.0	(1.49)	73.1	(5.79)	87.3	(1.46)
Houston	92.1	(0.97)	89.2	(2.27)	92.7	(0.94)	89.5	(1.11)	92.7	(1.81)	88.9	(1.23)
Jefferson County (KY)	92.8	(0.58)	73.6	(4.95)	93.7	(0.59)	86.1	(0.93)	‡	(†)	86.8	(0.98)
Los Angeles	93.2	(1.21)	89.0	(2.21)	93.9	(1.18)	93.0	(1.96)	86.5	(3.99)	93.9	(1.87)
Miami-Dade	91.8	(1.96)	88.1	(3.12)	92.2	(2.03)	94.3	(2.01)	95.1	(2.98)	94.1	(1.99)
Milwaukee	91.1	(1.80)	88.6	(6.46)	91.3	(1.73)	—	(†)	—	(†)	—	(†)
New York City	84.0	(3.42)	83.6	(5.11)	84.0	(3.58)	84.9	(2.69)	93.8	(2.20)	84.0	(2.93)
Philadelphia	92.5	(2.91)	86.7	(9.05)	93.0	(2.88)	99.0	(0.58)	‡	(†)	99.1	(0.55)
San Diego	97.8	(1.49)	97.3	(1.91)	97.8	(1.46)	91.9	(0.80)	93.0	(2.39)	91.7	(0.87)
Duval County (FL)	—	(†)	—	(†)	—	(†)	87.2	(1.32)	‡	(†)	87.8	(1.29)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-39. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)									
School characteristic	2013					2015			
	Total	National School Lunch Program (NSLP) status			Total	National School Lunch Program (NSLP) status			
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible		
Nation (public)	91.8 (0.33)	90.8 (0.43)	92.7 (0.37)		89.6 (0.53)	87.8 (0.86)	91.7 (0.36)		
Location									
City	88.9 (0.66)	87.8 (0.80)	91.0 (0.74)		87.7 (1.30)	85.1 (1.68)	92.9 (0.85)		
Suburban	93.2 (0.55)	92.3 (0.85)	93.8 (0.55)		91.2 (0.77)	90.5 (1.41)	92.0 (0.63)		
Town	91.2 (0.86)	91.7 (0.95)	90.7 (0.97)		89.1 (1.39)	88.9 (1.76)	89.4 (1.17)		
Rural	93.0 (0.75)	92.7 (0.82)	93.2 (0.84)		89.2 (1.28)	87.3 (1.66)	91.0 (1.27)		
Minority enrollment									
75 percent or more	88.5 (0.95)	87.8 (1.00)	91.2 (1.06)		83.5 (1.74)	82.7 (1.89)	88.0 (1.82)		
less than 75 percent	92.8 (0.35)	92.6 (0.42)	92.9 (0.39)		91.7 (0.38)	91.3 (0.51)	92.1 (0.40)		

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-40. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015

(Standard errors in parentheses)									
State	2013					2015			
	Total	National School Lunch Program (NSLP) status			Total	National School Lunch Program (NSLP) status			
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible		
Nation (public)	91.8 (0.33)	90.8 (0.43)	92.7 (0.37)		89.6 (0.53)	87.8 (0.86)	91.7 (0.36)		
Alabama	91.6 (1.74)	89.5 (2.52)	94.3 (1.75)		96.3 (1.51)	95.0 (2.13)	97.8 (0.96)		
Alaska	94.9 (0.73)	92.8 (1.40)	96.6 (0.65)		95.1 (0.64)	92.8 (0.93)	96.9 (0.66)		
Arizona	86.6 (2.06)	85.0 (3.13)	90.6 (2.68)		78.4 (2.94)	76.1 (3.72)	86.2 (2.56)		
Arkansas	93.0 (1.37)	91.3 (1.97)	95.4 (0.77)		93.4 (1.35)	92.1 (1.70)	95.4 (1.49)		
California	96.9 (0.87)	96.7 (0.84)	97.0 (1.29)		89.9 (2.00)	87.3 (2.88)	95.3 (1.87)		
Colorado	91.1 (1.62)	86.0 (3.02)	94.5 (1.08)		87.5 (2.63)	82.9 (3.91)	92.1 (2.10)		
Connecticut	92.8 (1.78)	88.6 (4.10)	94.9 (1.43)		95.4 (1.36)	93.4 (2.31)	96.5 (1.10)		
Delaware	95.0 (0.38)	93.8 (0.63)	96.1 (0.36)		95.8 (0.29)	96.1 (0.66)	95.5 (0.47)		
District of Columbia	62.5 (0.84)	56.8 (1.25)	80.4 (1.52)		58.7 (0.80)	52.4 (1.05)	74.5 (1.84)		
Florida	92.8 (1.43)	92.5 (1.29)	93.3 (1.74)		91.3 (1.72)	89.1 (2.13)	95.0 (1.34)		
Georgia	95.2 (1.27)	93.1 (1.85)	98.1 (0.72)		93.3 (1.91)	92.3 (2.48)	93.9 (2.31)		
Hawaii	93.5 (0.70)	91.7 (1.00)	95.3 (0.72)		92.7 (0.54)	91.9 (0.85)	93.6 (0.76)		
Idaho	91.9 (0.72)	91.9 (0.85)	91.8 (0.95)		82.6 (1.88)	82.1 (2.60)	83.0 (2.10)		
Illinois	99.4 (0.44)	99.2 (0.58)	99.6 (0.34)		96.3 (1.63)	97.4 (1.03)	95.1 (2.52)		
Indiana	86.3 (2.27)	86.4 (2.70)	86.1 (2.58)		81.1 (3.34)	80.7 (3.71)	81.3 (3.58)		
Iowa	89.7 (1.64)	88.4 (1.77)	90.5 (1.87)		91.0 (1.74)	91.8 (1.90)	90.5 (1.92)		
Kansas	92.5 (1.36)	90.6 (1.87)	94.1 (1.28)		94.4 (1.56)	93.5 (1.99)	95.2 (1.44)		
Kentucky	90.1 (1.72)	88.8 (2.05)	91.3 (1.65)		91.8 (1.31)	90.5 (1.55)	93.4 (1.33)		
Louisiana	88.3 (1.99)	88.1 (2.41)	88.6 (2.30)		78.3 (3.41)	77.0 (3.71)	80.9 (3.92)		
Maine	93.2 (1.33)	90.5 (2.12)	95.2 (0.97)		95.5 (0.82)	94.9 (0.96)	95.9 (0.94)		
Maryland	94.2 (0.99)	92.4 (1.18)	95.4 (1.11)		94.8 (0.90)	92.0 (1.35)	96.5 (0.83)		
Massachusetts	84.6 (2.08)	81.8 (3.42)	86.2 (2.11)		80.1 (2.40)	82.2 (3.08)	78.4 (2.87)		
Michigan	81.2 (3.06)	79.9 (3.79)	82.4 (3.32)		88.2 (2.97)	82.7 (4.95)	92.4 (2.22)		
Minnesota	96.4 (1.10)	96.9 (1.28)	96.1 (1.08)		96.0 (1.40)	95.5 (1.55)	96.3 (1.55)		
Mississippi	94.7 (1.25)	93.4 (1.64)	97.4 (0.74)		94.6 (1.55)	94.6 (1.81)	94.3 (1.85)		

See notes at end of table.

TABLE A-40. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015—Continued

(Standard errors in parentheses)												
State	2013						2015					
	Total		National School Lunch Program (NSLP) status			Total		National School Lunch Program (NSLP) status				
			NSLP eligible	Not NSLP eligible				NSLP eligible	Not NSLP eligible			
Missouri	94.9	(1.23)	94.4	(1.50)	95.3	(1.32)	90.6	(2.26)	87.9	(3.19)	92.7	(1.76)
Montana	98.0	(0.50)	98.1	(0.56)	98.0	(0.59)	95.7	(0.83)	95.6	(1.19)	96.0	(0.84)
Nebraska	98.5	(0.50)	97.8	(0.76)	99.1	(0.39)	98.8	(0.22)	97.7	(0.47)	99.5	(0.20)
Nevada	90.3	(1.20)	86.5	(1.47)	95.1	(1.03)	88.2	(1.23)	85.9	(1.53)	90.8	(1.23)
New Hampshire	95.9	(0.94)	96.7	(0.90)	97.0	(0.45)	96.8	(1.08)	97.0	(0.83)	98.9	(0.32)
New Jersey	97.5	(1.00)	96.5	(1.95)	98.0	(0.93)	98.4	(0.71)	96.3	(1.83)	99.4	(0.34)
New Mexico	92.7	(1.44)	92.5	(1.56)	93.2	(1.84)	91.6	(1.27)	91.8	(1.36)	90.7	(1.93)
New York	90.5	(1.80)	87.1	(2.44)	93.1	(1.97)	88.9	(2.26)	86.1	(3.10)	92.9	(2.05)
North Carolina	91.2	(1.90)	90.2	(2.06)	92.4	(2.32)	90.8	(1.61)	88.9	(2.29)	93.3	(1.30)
North Dakota	85.0	(0.46)	86.0	(1.19)	84.6	(0.55)	83.6	(0.56)	80.0	(1.30)	85.1	(0.80)
Ohio	72.9	(3.71)	70.2	(5.05)	74.8	(3.57)	61.9	(3.35)	65.0	(4.15)	59.4	(3.73)
Oklahoma	94.5	(1.46)	92.8	(2.16)	96.4	(1.20)	89.9	(2.46)	88.7	(3.10)	91.4	(2.52)
Oregon	95.0	(1.48)	94.5	(1.85)	95.6	(1.37)	90.9	(1.77)	92.2	(1.70)	89.2	(2.36)
Pennsylvania	92.3	(1.63)	90.9	(1.52)	93.2	(1.91)	94.4	(1.86)	92.1	(2.75)	96.3	(1.62)
Rhode Island	94.8	(0.39)	94.1	(0.70)	95.2	(0.45)	97.2	(0.24)	95.0	(0.56)	99.0	(0.23)
South Carolina	94.6	(1.48)	95.0	(1.28)	94.1	(2.48)	93.2	(1.28)	91.8	(1.73)	95.2	(1.38)
South Dakota	85.4	(1.14)	84.8	(2.62)	85.7	(0.98)	86.1	(1.13)	84.2	(1.64)	87.0	(1.28)
Tennessee	95.3	(1.69)	94.7	(2.25)	96.1	(1.33)	94.3	(2.28)	91.9	(3.80)	97.0	(1.39)
Texas	90.9	(1.96)	88.8	(2.43)	93.3	(1.90)	88.8	(3.26)	86.1	(4.28)	91.8	(2.78)
Utah	87.6	(1.49)	88.3	(2.04)	87.2	(1.40)	90.8	(1.29)	86.7	(2.23)	93.0	(1.24)
Vermont	88.2	(0.42)	87.6	(0.86)	88.5	(0.60)	88.2	(0.47)	86.6	(1.05)	89.2	(0.81)
Virginia	91.0	(1.42)	89.2	(1.86)	91.9	(1.49)	93.9	(1.15)	91.9	(1.83)	95.1	(1.27)
Washington	90.1	(1.59)	89.2	(1.85)	90.8	(1.93)	91.6	(1.67)	90.7	(2.26)	92.5	(2.05)
West Virginia	91.5	(1.37)	91.4	(1.58)	91.7	(1.57)	83.6	(2.75)	83.4	(3.07)	83.7	(3.23)
Wisconsin	89.8	(1.73)	90.4	(1.72)	89.2	(1.98)	87.1	(2.66)	90.0	(2.63)	88.1	(3.15)
Wyoming	95.1	(0.33)	95.1	(0.57)	95.1	(0.44)	96.2	(0.34)	96.5	(0.70)	96.0	(0.48)
Department of Defense Dependents Schools	94.5	(0.38)	‡	(†)	‡	(†)	94.7	(0.42)	‡	(†)	‡	(†)

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-41. Percentage of 8th-grade public school students who have a mathematics teacher with a permanent teaching certificate, by National School Lunch Program status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)										
Jurisdiction	2013					2015				
	Total	National School Lunch Program (NSLP) status			Total	National School Lunch Program (NSLP) status				
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible			
Nation (public)	91.8 (0.33)	90.8 (0.43)	92.7 (0.37)	89.6 (0.53)	87.8 (0.86)	91.7 (0.36)				
Large city	88.4 (0.84)	86.9 (0.94)	91.9 (0.84)	83.6 (2.02)	81.0 (2.36)	90.5 (1.58)				
Albuquerque	94.5 (0.68)	94.0 (0.92)	95.5 (0.99)	85.0 (1.95)	85.1 (1.90)	84.6 (3.06)				
Atlanta	93.1 (0.35)	93.0 (0.42)	93.4 (1.60)	86.5 (0.66)	88.4 (0.57)	76.9 (3.09)				
Austin	91.7 (0.79)	89.1 (1.15)	95.0 (0.95)	89.0 (0.94)	85.7 (1.39)	93.2 (1.14)				
Baltimore City	81.9 (3.54)	81.5 (3.56)	83.9 (5.44)	77.9 (4.79)	76.3 (5.13)	83.4 (4.50)				
Boston	96.1 (0.26)	95.2 (0.31)	99.1 (0.60)	86.9 (0.82)	86.9 (0.82)	† (†)				
Charlotte	78.7 (1.07)	74.8 (1.55)	83.3 (1.47)	84.3 (2.51)	79.5 (3.25)	91.3 (2.71)				
Chicago	99.4 (0.39)	99.8 (0.15)	97.6 (2.32)	97.0 (1.60)	96.8 (1.72)	98.4 (1.86)				
Cleveland	74.0 (0.74)	74.0 (0.74)	‡ (†)	67.6 (1.11)	67.6 (1.11)	‡ (†)				
Dallas	86.9 (0.77)	86.1 (0.85)	93.4 (2.51)	87.1 (1.30)	86.3 (1.40)	93.7 (3.54)				
Detroit	84.7 (1.24)	85.0 (1.46)	82.5 (3.44)	81.1 (0.67)	82.7 (1.20)	77.1 (2.32)				
District of Columbia (DCPS)	81.6 (1.14)	73.2 (1.71)	100.0 ¹ (†)	72.2 (1.25)	60.6 (1.80)	100.0 ¹ (†)				
Fresno	93.7 (0.59)	93.1 (0.64)	99.4 (0.56)	92.9 (0.71)	90.9 (0.90)	100.0 ¹ (†)				
Hillsborough County (FL)	93.6 (1.54)	92.0 (1.39)	95.4 (2.53)	86.0 (1.49)	83.3 (2.11)	89.7 (2.19)				
Houston	92.1 (0.97)	90.9 (1.10)	97.4 (0.96)	89.5 (1.11)	87.4 (1.48)	95.9 (0.89)				
Jefferson County (KY)	92.8 (0.58)	90.6 (0.87)	96.4 (0.87)	86.1 (0.93)	79.8 (1.44)	94.3 (1.23)				
Los Angeles	93.2 (1.21)	91.9 (1.40)	97.9 (1.21)	93.0 (1.96)	92.3 (2.23)	97.6 (1.44)				
Miami-Dade	91.8 (1.96)	91.6 (2.26)	92.4 (2.55)	94.3 (2.01)	92.5 (2.65)	98.7 (0.64)				
Milwaukee	91.1 (1.80)	90.1 (2.05)	96.0 (1.50)	— (†)	— (†)	— (†)				
New York City	84.0 (3.42)	83.4 (3.33)	86.5 (4.76)	84.9 (2.69)	83.6 (3.09)	89.1 (2.68)				
Philadelphia	92.5 (2.91)	92.2 (2.90)	94.6 (4.72)	99.0 (0.58)	99.7 (0.25)	98.3 (1.09)				
San Diego	97.8 (1.49)	96.2 (2.51)	100.0 ¹ (†)	91.9 (0.80)	92.9 (1.20)	90.0 (1.87)				
Duval County (FL)	— (†)	— (†)	— (†)	87.2 (1.32)	81.5 (2.86)	91.4 (0.91)				

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Mathematics Assessments.

TABLE A-42. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)													
2013													
School characteristic	Total	Race/ethnicity											
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Nation (public)	92.3 (0.36)	92.5 (0.46)	90.7 (0.66)	92.3 (0.71)	95.5 (0.67)	92.1 (1.83)	93.3 (0.87)	94.0 (0.70)					
Location													
City	90.8 (0.79)	92.6 (0.85)	87.2 (1.45)	90.5 (1.21)	95.2 (1.46)	93.9 (3.41)	91.8 (2.85)	92.2 (1.61)					
Suburban	93.8 (0.49)	93.4 (0.54)	94.2 (0.81)	94.1 (1.43)	96.2 (0.61)	93.4 (1.97)	91.9 (2.53)	94.7 (0.95)					
Town	90.8 (1.34)	90.2 (1.51)	91.4 (1.65)	91.4 (2.08)	91.4 (2.26)	92.2 (2.93)	96.2 (1.19)	94.6 (2.05)					
Rural	92.7 (0.76)	92.5 (0.89)	92.4 (1.22)	93.6 (1.38)	95.0 (1.30)	85.7 (6.70)	93.0 (1.28)	94.8 (1.13)					
Minority enrollment													
75 percent or more	90.4 (1.02)	92.0 (1.31)	87.4 (1.31)	91.3 (1.27)	95.6 (2.00)	92.5 (2.39)	86.3 (3.24)	89.5 (3.42)					
Less than 75 percent	93.0 (0.40)	92.5 (0.47)	93.7 (0.64)	93.4 (0.64)	95.4 (0.54)	91.9 (2.88)	96.1 (0.66)	94.7 (0.66)					
2015													
School characteristic	Total	Race/ethnicity											
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Nation (public)	91.3 (0.47)	92.2 (0.35)	89.8 (0.78)	89.2 (1.24)	95.0 (0.54)	93.2 (1.76)	92.1 (1.34)	92.0 (0.78)					
Location													
City	88.8 (1.19)	91.7 (0.66)	88.4 (1.20)	85.0 (2.68)	94.3 (0.85)	91.6 (3.15)	92.6 (1.92)	93.2 (1.35)					
Suburban	93.0 (0.47)	92.6 (0.55)	91.2 (0.97)	94.0 (0.77)	95.9 (0.69)	93.8 (3.07)	92.6 (3.52)	91.8 (1.20)					
Town	91.5 (1.34)	92.7 (0.95)	91.4 (2.25)	86.5 (5.67)	98.1 (1.12)	97.8 (1.88)	92.9 (3.11)	89.4 (2.43)					
Rural	91.3 (0.96)	91.5 (0.80)	89.7 (1.60)	90.8 (3.03)	92.0 (2.10)	87.9 (5.23)	90.9 (2.21)	92.4 (2.35)					
Minority enrollment													
75 percent or more	88.1 (1.46)	89.7 (2.07)	88.0 (1.22)	86.6 (2.17)	95.0 (1.15)	94.2 (1.82)	89.2 (3.43)	93.1 (1.99)					
Less than 75 percent	92.4 (0.36)	92.3 (0.36)	91.7 (0.73)	92.5 (0.91)	95.0 (0.66)	92.3 (2.78)	93.5 (1.40)	91.9 (0.86)					

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-43. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015

(Standard errors in parentheses)																
State	2013															
	Total	Race/ethnicity								Pacific Islander	American Indian/ Alaska Native	Two or more races				
		White	Black	Hispanic	Asian											
Nation (public)	92.3	(0.36)	92.5	(0.46)	90.7	(0.66)	92.3	(0.71)	95.5	(0.67)	92.1	(1.83)	93.3	(0.87)	94.0	(0.70)
Alabama	97.3	(1.12)	99.2	(0.50)	94.1	(2.85)	93.3	(3.49)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Alaska	94.0	(1.08)	95.8	(1.47)	98.8	(1.32)	99.5	(0.58)	94.9	(1.95)	‡	(†)	85.6	(3.14)	99.0	(0.82)
Arizona	83.7	(2.20)	85.3	(2.65)	79.9	(6.02)	81.9	(3.15)	90.5	(3.84)	‡	(†)	83.3	(4.49)	‡	(†)
Arkansas	93.6	(1.36)	95.0	(1.39)	90.4	(2.31)	90.1	(2.76)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
California	93.9	(1.54)	96.3	(1.32)	87.5	(3.88)	92.5	(2.04)	97.4	(1.69)	‡	(†)	‡	(†)	95.7	(4.28)
Colorado	94.1	(1.46)	94.5	(1.12)	97.4	(1.70)	92.3	(3.59)	98.8	(1.17)	‡	(†)	‡	(†)	93.7	(3.26)
Connecticut	97.2	(1.20)	98.1	(0.84)	94.9	(3.82)	95.2	(2.85)	97.4	(2.52)	‡	(†)	‡	(†)	‡	(†)
Delaware	98.2	(0.20)	98.9	(0.32)	96.4	(0.48)	99.5	(0.34)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
District of Columbia	59.9	(0.78)	51.5	(5.18)	59.6	(1.01)	64.8	(3.08)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Florida	94.5	(1.10)	95.4	(1.45)	92.9	(1.49)	93.7	(1.03)	94.5	(2.68)	‡	(†)	‡	(†)	98.1	(1.24)
Georgia	97.0	(1.31)	98.1	(1.36)	95.4	(2.11)	96.4	(2.65)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
Hawaii	94.6	(0.46)	96.0	(1.07)	85.2	(4.77)	98.7	(0.92)	95.8	(0.51)	92.6	(0.99)	‡	(†)	96.7	(1.52)
Idaho	98.2	(0.47)	98.1	(0.51)	‡	(†)	98.9	(0.55)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Illinois	99.5	(0.24)	99.9	(0.09)	99.4	(0.48)	98.8	(0.92)	99.8	(0.20)	‡	(†)	‡	(†)	100.0 ¹	(†)
Indiana	87.4	(2.48)	88.2	(2.35)	82.5	(11.39)	87.9	(4.36)	‡	(†)	‡	(†)	‡	(†)	88.9	(4.02)
Iowa	91.2	(1.88)	91.2	(2.11)	90.1	(3.71)	91.6	(2.28)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Kansas	93.4	(1.35)	93.9	(1.40)	89.8	(3.81)	92.7	(2.26)	‡	(†)	‡	(†)	‡	(†)	94.6	(2.12)
Kentucky	94.4	(1.00)	94.4	(1.11)	92.6	(1.32)	96.9	(2.67)	‡	(†)	‡	(†)	‡	(†)	99.6	(0.45)
Louisiana	89.6	(1.68)	89.8	(2.25)	88.9	(2.28)	92.0	(2.84)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maine	94.9	(1.00)	94.8	(1.04)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Maryland	93.6	(1.21)	93.9	(1.62)	92.5	(1.50)	92.6	(2.43)	96.1	(1.92)	‡	(†)	‡	(†)	98.7	(1.26)
Massachusetts	88.0	(2.33)	87.2	(2.71)	89.5	(2.54)	88.2	(3.28)	94.5	(1.86)	‡	(†)	‡	(†)	90.0	(4.52)
Michigan	85.4	(2.86)	85.6	(2.96)	79.5	(6.63)	93.9	(3.04)	91.9	(3.60)	‡	(†)	‡	(†)	‡	(†)
Minnesota	98.0	(0.78)	97.5	(0.98)	100.0 ¹	(†)	98.5	(0.89)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)
Mississippi	92.8	(1.46)	94.4	(1.71)	90.9	(1.75)	91.8	(3.71)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Missouri	92.9	(2.24)	96.0	(1.26)	79.2	(8.86)	96.2	(2.27)	‡	(†)	‡	(†)	‡	(†)	‡	(†)
Montana	92.6	(0.86)	93.6	(0.72)	‡	(†)	93.9	(2.74)	‡	(†)	‡	(†)	84.0	(4.84)	‡	(†)
Nebraska	99.7	(0.29)	99.6	(0.33)	100.0 ¹	(†)	100.0 ¹	(†)	‡	(†)	‡	(†)	‡	(†)	97.7	(2.17)
Nevada	90.0	(0.47)	93.2	(0.87)	86.8	(2.62)	87.0	(1.09)	92.3	(1.85)	‡	(†)	‡	(†)	92.2	(1.79)
New Hampshire	96.8	(0.87)	96.9	(0.92)	‡	(†)	96.7	(1.88)	91.7	(3.08)	‡	(†)	‡	(†)	‡	(†)
New Jersey	97.4	(0.98)	98.1	(0.84)	94.2	(3.72)	98.1	(0.96)	96.8	(1.49)	‡	(†)	‡	(†)	‡	(†)
New Mexico	95.8	(0.49)	96.3	(0.82)	‡	(†)	94.9	(0.71)	‡	(†)	‡	(†)	99.5	(0.33)	‡	(†)
New York	91.8	(1.44)	92.1	(1.87)	91.3	(3.48)	90.2	(1.95)	95.5	(1.55)	‡	(†)	‡	(†)	‡	(†)
North Carolina	89.4	(1.93)	91.2	(2.68)	86.9	(2.29)	88.7	(2.35)	79.7	(6.88)	‡	(†)	‡	(†)	91.0	(2.79)
North Dakota	89.1	(0.37)	89.1	(0.40)	89.7	(3.97)	‡	(†)	‡	(†)	‡	(†)	87.6	(1.83)	‡	(†)
Ohio	72.7	(3.04)	73.2	(2.98)	67.9	(7.91)	77.5	(5.22)	75.5	(6.63)	‡	(†)	‡	(†)	77.3	(6.71)
Oklahoma	96.2	(1.22)	98.0	(0.61)	94.9	(2.18)	86.2	(6.00)	‡	(†)	‡	(†)	99.7	(0.25)	97.7	(1.56)
Oregon	94.9	(1.31)	95.0	(1.45)	‡	(†)	94.7	(1.53)	92.6	(3.29)	‡	(†)	‡	(†)	96.5	(2.16)

See notes at end of table.

TABLE A-43. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)													
2013													
State	Race/ethnicity												
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Pennsylvania	95.2 (1.17)	95.3 (1.36)	95.9 (1.55)	93.2 (3.08)	95.8 (2.26)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Rhode Island	92.1 (0.44)	92.4 (0.54)	88.1 (2.25)	92.1 (0.98)	91.5 (3.02)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
South Carolina	93.5 (1.51)	93.8 (1.51)	92.7 (1.95)	94.5 (2.77)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
South Dakota	87.9 (0.77)	89.3 (0.77)	‡ (†)	89.5 (3.59)	‡ (†)	‡ (†)	81.2 (3.06)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Tennessee	97.5 (1.03)	97.5 (1.22)	97.0 (2.46)	98.4 (1.55)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Texas	91.5 (2.22)	87.6 (5.16)	95.3 (1.47)	92.4 (1.73)	98.0 (1.44)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	99.5 (0.22)	‡ (†)
Utah	91.4 (1.66)	91.6 (1.69)	‡ (†)	90.5 (2.76)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Vermont	96.2 (0.25)	96.1 (0.25)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Virginia	94.7 (1.11)	96.7 (0.91)	92.1 (2.52)	92.7 (2.50)	88.8 (3.11)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.1 (2.17)	‡ (†)
Washington	91.3 (1.90)	91.6 (2.13)	90.5 (3.44)	91.2 (2.25)	90.1 (3.80)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	91.3 (3.13)	‡ (†)
West Virginia	85.5 (1.73)	85.9 (1.67)	78.3 (5.93)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Wisconsin	91.0 (2.03)	90.4 (2.34)	94.3 (1.44)	91.3 (2.50)	92.4 (3.08)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Wyoming	99.9 (0.07)	99.8 (0.08)	‡ (†)	100.0 ¹ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	100.0 ¹ (†)	‡ (†)	‡ (†)
Department of Defense Dependents Schools	97.0 (0.28)	96.9 (0.49)	95.4 (1.25)	98.5 (0.64)	97.6 (1.15)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.4 (1.18)	‡ (†)
2015													
State	Race/ethnicity												
	Total	White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races					
Nation (public)	91.3 (0.47)	92.2 (0.35)	89.8 (0.78)	89.2 (1.24)	95.0 (0.54)	93.2 (1.76)	92.1 (1.34)	92.0 (0.78)					
Alabama	97.8 (0.99)	99.5 (0.51)	94.5 (2.43)	96.6 (3.23)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Alaska	92.8 (1.26)	96.4 (0.71)	‡ (†)	99.1 (0.89)	100.0 ¹ (†)	‡ (†)	‡ (†)	80.4 (3.97)	‡ (†)	‡ (†)	‡ (†)	96.1 (2.05)	‡ (†)
Arizona	77.4 (2.89)	73.9 (4.02)	80.6 (5.23)	80.7 (3.58)	‡ (†)	‡ (†)	‡ (†)	75.5 (10.49)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Arkansas	97.3 (1.12)	97.3 (1.21)	98.6 (0.93)	94.1 (2.72)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
California	92.0 (1.51)	97.2 (1.21)	91.9 (2.33)	87.7 (2.46)	97.3 (1.02)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	92.3 (4.64)	‡ (†)
Colorado	87.3 (3.07)	88.0 (3.12)	94.4 (2.82)	84.6 (4.81)	95.0 (2.53)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	87.2 (5.51)	‡ (†)
Connecticut	96.0 (1.25)	96.8 (1.25)	96.0 (2.75)	92.1 (3.16)	100.0 ¹ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Delaware	90.5 (0.55)	91.4 (0.97)	89.5 (1.12)	90.8 (1.72)	91.3 (2.68)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
District of Columbia	68.8 (0.87)	‡ (†)	71.3 (1.07)	58.4 (3.43)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Florida	91.4 (1.87)	92.0 (2.25)	89.5 (2.67)	91.0 (2.10)	96.6 (2.62)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	98.4 (0.72)	‡ (†)
Georgia	97.1 (1.09)	97.2 (1.47)	96.8 (1.35)	97.5 (1.32)	96.9 (2.51)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	98.1 (1.84)	‡ (†)
Hawaii	93.2 (1.11)	91.1 (3.70)	‡ (†)	90.8 (2.56)	94.3 (0.79)	94.3 (1.67)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	88.5 (2.48)	‡ (†)
Idaho	94.7 (1.04)	95.0 (1.06)	‡ (†)	93.8 (1.98)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Illinois	99.1 (0.41)	99.7 (0.26)	96.1 (2.02)	99.1 (0.60)	99.8 (0.19)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Indiana	87.7 (2.44)	87.9 (2.36)	89.1 (6.85)	85.9 (4.35)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	90.9 (3.63)	‡ (†)
Iowa	88.1 (2.48)	88.0 (2.62)	90.4 (3.19)	86.8 (4.72)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Kansas	93.5 (1.18)	94.9 (0.95)	90.1 (3.51)	91.3 (2.86)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	89.7 (3.56)	‡ (†)
Kentucky	90.7 (1.92)	91.2 (1.95)	88.1 (2.88)	87.1 (4.16)	92.5 (3.95)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	89.6 (4.39)	‡ (†)
Louisiana	75.7 (4.02)	81.8 (4.19)	68.5 (5.22)	75.8 (6.47)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)

See notes at end of table.

TABLE A-43. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and state: 2013 and 2015—Continued

(Standard errors in parentheses)											
State	2015										
	Total	Race/ethnicity									Two or more races
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native				
Maine	93.8 (0.89)	93.8 (0.96)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Maryland	94.0 (1.28)	95.9 (1.58)	90.5 (1.63)	95.8 (1.79)	95.7 (2.40)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	90.6 (4.83)	
Massachusetts	89.2 (2.29)	89.0 (2.79)	84.9 (4.76)	89.8 (2.83)	92.0 (2.73)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	95.7 (2.61)	
Michigan	87.6 (3.01)	87.1 (3.41)	87.9 (4.44)	87.8 (5.68)	98.4 (1.39)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Minnesota	97.3 (1.11)	97.5 (1.08)	97.0 (1.78)	96.5 (1.67)	96.6 (2.08)	‡ (†)	‡ (†)	100.0 ¹	‡ (†)	‡ (†)	
Mississippi	95.0 (1.65)	95.0 (2.38)	94.9 (1.94)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Missouri	96.5 (1.20)	97.6 (0.67)	88.2 (7.32)	98.9 (1.09)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Montana	94.9 (0.98)	94.8 (1.17)	‡ (†)	96.8 (1.84)	‡ (†)	‡ (†)	‡ (†)	93.0 (1.58)	‡ (†)	‡ (†)	
Nebraska	99.5 (0.33)	99.5 (0.35)	99.0 (0.94)	99.3 (0.58)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Nevada	87.1 (0.95)	93.1 (1.17)	74.8 (4.60)	84.8 (1.28)	88.8 (2.31)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	86.6 (3.47)	
New Hampshire	95.1 (0.73)	95.1 (0.73)	‡ (†)	97.2 (2.03)	92.9 (3.43)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
New Jersey	97.0 (1.69)	97.1 (1.81)	95.9 (2.26)	96.4 (2.10)	98.6 (1.03)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
New Mexico	94.9 (1.23)	92.9 (2.50)	‡ (†)	95.1 (1.08)	‡ (†)	‡ (†)	‡ (†)	99.3 (0.67)	‡ (†)	‡ (†)	
New York	91.5 (1.34)	95.0 (1.37)	88.3 (2.65)	86.4 (2.94)	90.1 (2.77)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
North Carolina	92.7 (2.00)	95.2 (1.70)	90.4 (3.00)	88.0 (3.48)	92.3 (3.51)	‡ (†)	‡ (†)	88.7 (5.73)	95.3 (2.73)	‡ (†)	
North Dakota	92.0 (0.40)	91.8 (0.48)	‡ (†)	94.0 (2.55)	‡ (†)	‡ (†)	‡ (†)	93.1 (2.08)	‡ (†)	‡ (†)	
Ohio	68.1 (3.02)	66.5 (3.38)	70.9 (6.01)	80.7 (4.48)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	68.7 (6.37)	
Oklahoma	97.9 (1.17)	98.0 (1.26)	99.3 (0.70)	97.5 (1.71)	‡ (†)	‡ (†)	‡ (†)	97.4 (1.47)	96.9 (2.21)	‡ (†)	
Oregon	88.5 (2.37)	89.0 (2.58)	‡ (†)	87.5 (3.36)	88.1 (5.62)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	84.3 (5.13)	
Pennsylvania	95.2 (1.89)	97.2 (1.54)	87.1 (5.90)	93.9 (2.99)	96.5 (1.42)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Rhode Island	96.5 (0.32)	97.3 (0.39)	93.8 (1.90)	94.2 (1.18)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
South Carolina	91.0 (1.48)	92.9 (1.47)	86.9 (2.81)	90.6 (3.93)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	96.6 (2.38)	
South Dakota	92.4 (1.20)	92.8 (1.29)	‡ (†)	92.8 (3.33)	‡ (†)	‡ (†)	‡ (†)	86.2 (4.11)	‡ (†)	‡ (†)	
Tennessee	97.9 (0.92)	97.7 (1.04)	99.2 (0.56)	95.6 (3.20)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Texas	89.9 (2.99)	91.5 (2.59)	91.2 (2.67)	87.9 (4.32)	98.9 (1.08)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.2 (2.68)	
Utah	91.5 (1.81)	90.9 (1.97)	‡ (†)	93.4 (2.39)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Vermont	93.0 (0.44)	92.8 (0.49)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Virginia	94.4 (1.27)	95.3 (1.38)	92.9 (2.00)	94.9 (1.99)	89.2 (4.05)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	94.7 (2.70)	
Washington	90.3 (2.17)	90.3 (2.32)	87.2 (6.16)	93.4 (2.28)	89.0 (4.71)	‡ (†)	‡ (†)	96.8 (2.88)	82.7 (5.11)	‡ (†)	
West Virginia	85.1 (2.10)	85.6 (2.10)	72.1 (6.30)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Wisconsin	92.9 (1.66)	94.2 (1.63)	85.9 (6.58)	90.1 (3.61)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Wyoming	91.9 (0.55)	91.6 (0.66)	‡ (†)	91.0 (1.65)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	
Department of Defense Dependents Schools	97.4 (0.26)	98.3 (0.56)	95.4 (1.10)	97.0 (1.10)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	97.0 (1.29)	

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-44. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015

(Standard errors in parentheses)													
2013													
Jurisdiction	Total	Race/ethnicity										Two or more races	
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native						
Nation (public)	92.3 (0.36)	92.5 (0.46)	90.7 (0.66)	92.3 (0.71)	95.5 (0.67)	92.1 (1.83)	93.3 (0.87)	94.0 (0.70)					
Large city	89.9 (1.06)	92.1 (1.30)	87.1 (1.76)	89.7 (1.39)	93.8 (2.45)	93.2 (4.55)	88.5 (5.60)	91.3 (2.57)					
Albuquerque	95.1 (0.51)	96.4 (1.17)	‡ (†)	94.6 (0.61)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Atlanta	96.7 (0.25)	97.8 (1.58)	96.4 (0.29)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Austin	92.5 (0.64)	89.0 (1.81)	93.1 (2.59)	94.0 (0.85)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Baltimore City	85.3 (2.72)	‡ (†)	85.7 (2.98)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Boston	94.9 (0.41)	96.9 (1.06)	95.0 (0.73)	93.1 (1.15)	97.3 (1.30)	‡ (†)	‡ (†)	‡ (†)					
Charlotte	75.3 (1.31)	87.7 (1.47)	68.7 (1.97)	70.9 (3.89)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Chicago	97.7 (1.31)	98.9 (1.07)	98.8 (0.98)	96.3 (2.77)	98.7 (1.41)	‡ (†)	‡ (†)	‡ (†)					
Cleveland	79.4 (0.68)	74.2 (2.68)	77.4 (1.10)	92.0 (1.86)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Dallas	89.0 (0.77)	‡ (†)	90.5 (1.67)	88.8 (0.97)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Detroit	77.5 (2.33)	‡ (†)	73.9 (2.66)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
District of Columbia (DCPS)	76.6 (1.23)	66.0 (5.11)	79.3 (1.55)	69.8 (3.56)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Fresno	96.8 (0.49)	97.9 (1.49)	98.3 (1.22)	96.8 (0.62)	95.9 (1.41)	‡ (†)	‡ (†)	‡ (†)					
Hillsborough County (FL)	94.5 (0.74)	97.9 (0.86)	91.8 (2.20)	92.2 (1.39)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Houston	90.3 (1.50)	98.4 (1.11)	89.7 (2.90)	89.5 (1.90)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Jefferson County (KY)	88.4 (0.84)	88.7 (1.28)	87.4 (1.49)	90.0 (3.92)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Los Angeles	97.3 (0.57)	100.0 ¹ (†)	96.0 (1.62)	96.8 (0.68)	99.3 (0.89)	‡ (†)	‡ (†)	‡ (†)					
Miami-Dade	93.5 (1.29)	94.1 (3.27)	83.6 (4.35)	96.4 (1.37)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Milwaukee	94.1 (1.38)	94.5 (1.70)	95.8 (0.97)	92.3 (3.67)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
New York City	90.0 (2.35)	95.6 (1.71)	87.6 (5.85)	87.1 (2.68)	96.5 (1.32)	‡ (†)	‡ (†)	‡ (†)					
Philadelphia	93.0 (2.94)	100.0 ¹ (†)	91.8 (4.21)	88.2 (6.11)	97.5 (1.91)	‡ (†)	‡ (†)	‡ (†)					
San Diego	98.0 (0.41)	100.0 ¹ (†)	99.0 (1.04)	96.6 (0.87)	97.2 (1.13)	‡ (†)	‡ (†)	‡ (†)					
Duval County (FL)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)					
2015													
Jurisdiction	Total	Race/ethnicity										Two or more races	
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native						
Nation (public)	91.3 (0.47)	92.2 (0.35)	89.8 (0.78)	89.2 (1.24)	95.0 (0.54)	93.2 (1.76)	92.1 (1.34)	92.0 (0.78)					
Large city	87.4 (2.06)	90.5 (1.56)	87.6 (1.44)	84.1 (3.74)	93.4 (1.14)	93.4 (2.44)	92.0 (2.88)	94.6 (1.08)					
Albuquerque	98.1 (0.65)	99.0 (0.71)	‡ (†)	97.6 (0.83)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Atlanta	99.6 (0.19)	100.0 ¹ (†)	99.5 (0.24)	100.0 ¹ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Austin	99.9 (0.12)	100.0 ¹ (†)	100.0 ¹ (†)	99.8 (0.21)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Baltimore City	69.4 (5.45)	‡ (†)	64.7 (6.24)	81.8 (9.11)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Boston	88.1 (1.10)	75.3 (4.88)	90.9 (1.98)	90.7 (1.51)	90.0 (3.82)	‡ (†)	‡ (†)	‡ (†)					
Charlotte	87.4 (1.09)	94.1 (1.31)	82.5 (2.42)	86.8 (2.31)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Chicago	95.2 (2.17)	89.9 (7.75)	93.0 (3.53)	98.0 (1.72)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					
Cleveland	71.5 (1.02)	69.1 (5.14)	73.0 (1.72)	71.0 (3.45)	‡ (†)	‡ (†)	‡ (†)	‡ (†)					

See notes at end of table.

TABLE A-44. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by race/ethnicity and jurisdiction: 2013 and 2015—Continued

(Standard errors in parentheses)												
Jurisdiction	2015											
	Total	Race/ethnicity										Two or more races
		White	Black	Hispanic	Asian	Pacific Islander	American Indian/ Alaska Native					
Dallas	91.6 (0.93)	‡ (†)	92.3 (1.93)	91.2 (1.07)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Detroit	85.1 (0.63)	‡ (†)	83.1 (0.77)	93.5 (1.58)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
District of Columbia (DCPS)	81.2 (1.31)	‡ (†)	83.9 (1.52)	57.9 (5.10)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Fresno	88.6 (1.68)	‡ (†)	‡ (†)	87.6 (2.10)	95.6 (2.53)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Hillsborough County (FL)	95.0 (2.58)	99.0 (0.63)	87.7 (7.14)	95.8 (2.37)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Houston	88.7 (1.53)	93.8 (2.66)	84.1 (3.95)	89.2 (1.26)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Jefferson County (KY)	87.5 (2.85)	86.6 (3.45)	88.2 (2.89)	87.3 (4.54)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Los Angeles	94.5 (1.54)	93.7 (3.30)	94.2 (3.15)	94.5 (1.58)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Miami-Dade	90.7 (2.76)	93.3 (4.00)	92.1 (2.84)	89.8 (3.45)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Milwaukee	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)	— (†)
New York City	83.9 (3.09)	89.8 (3.90)	85.1 (3.69)	78.3 (5.01)	87.1 (3.75)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
Philadelphia	96.3 (2.80)	100.0 ¹ (†)	98.4 (0.85)	86.7 (11.17)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)
San Diego	93.0 (1.67)	92.6 (1.58)	95.4 (3.52)	90.9 (2.89)	97.2 (1.50)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	93.9 (2.77)	‡ (†)
Duval County (FL)	81.1 (2.63)	89.0 (3.26)	70.1 (2.95)	87.1 (3.75)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)	‡ (†)

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Race/ethnicity based on school records. Race categories exclude persons of Hispanic ethnicity. Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-45. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)							
School characteristic	2013			2015			
	Total	Disability status		Total	Disability status		Total
		With a disability	Without a disability		With a disability	Without a disability	
Nation (public)	92.3 (0.36)	91.4 (0.47)	92.5 (0.38)	91.3 (0.47)	90.8 (0.61)	91.3 (0.49)	
Location							
City	90.8 (0.79)	89.9 (0.98)	90.9 (0.82)	88.8 (1.19)	88.3 (1.42)	88.9 (1.24)	
Suburban	93.8 (0.49)	91.7 (0.84)	94.1 (0.49)	93.0 (0.47)	92.1 (0.78)	93.1 (0.47)	
Town	90.8 (1.34)	91.5 (1.11)	90.7 (1.45)	91.5 (1.34)	91.7 (1.41)	91.4 (1.46)	
Rural	92.7 (0.76)	92.4 (0.88)	92.8 (0.79)	91.3 (0.96)	91.6 (1.50)	91.2 (0.93)	
Minority enrollment							
75 percent or more	90.4 (1.02)	87.4 (1.46)	90.7 (1.03)	88.1 (1.46)	86.9 (1.76)	88.3 (1.55)	
Less than 75 percent	93.0 (0.40)	92.5 (0.47)	93.0 (0.42)	92.4 (0.36)	92.1 (0.62)	92.4 (0.36)	

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-46. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015

(Standard errors in parentheses)							
State	2013			2015			
	Total	Disability status		Total	Disability status		Total
		With a disability	Without a disability		With a disability	Without a disability	
Nation (public)	92.3 (0.36)	91.4 (0.47)	92.5 (0.38)	91.3 (0.47)	90.8 (0.61)	91.3 (0.49)	
Alabama	97.3 (1.12)	96.5 (1.96)	97.4 (1.12)	97.8 (0.99)	97.9 (1.06)	97.8 (1.01)	
Alaska	94.0 (1.08)	91.1 (2.21)	94.5 (1.10)	92.8 (1.26)	95.3 (1.62)	92.6 (1.37)	
Arizona	83.7 (2.20)	78.7 (3.30)	84.3 (2.27)	77.4 (2.89)	72.5 (3.83)	77.9 (3.05)	
Arkansas	93.6 (1.36)	95.9 (1.58)	93.2 (1.42)	97.3 (1.12)	98.2 (1.55)	97.2 (1.11)	
California	93.9 (1.54)	91.9 (2.27)	94.0 (1.55)	92.0 (1.51)	91.8 (1.87)	92.0 (1.65)	
Colorado	94.1 (1.46)	95.5 (1.44)	94.0 (1.57)	87.3 (3.07)	84.2 (4.54)	87.7 (3.00)	
Connecticut	97.2 (1.20)	97.0 (1.70)	97.2 (1.20)	96.0 (1.25)	94.5 (2.01)	96.2 (1.16)	
Delaware	98.2 (0.20)	95.0 (1.03)	98.7 (0.18)	90.5 (0.55)	91.1 (1.53)	90.4 (0.61)	
District of Columbia	59.9 (0.78)	64.3 (2.76)	59.1 (0.99)	68.8 (0.87)	62.6 (3.75)	70.2 (0.99)	
Florida	94.5 (1.10)	95.3 (1.59)	94.4 (1.18)	91.4 (1.87)	94.9 (1.74)	90.9 (2.05)	
Georgia	97.0 (1.31)	95.2 (2.32)	97.1 (1.27)	97.1 (1.09)	96.3 (1.90)	97.2 (1.10)	
Hawaii	94.6 (0.46)	89.8 (1.81)	95.1 (0.46)	93.2 (1.11)	88.7 (2.67)	93.7 (1.08)	
Idaho	98.2 (0.47)	97.6 (1.45)	98.2 (0.49)	94.7 (1.04)	96.7 (1.65)	94.5 (1.08)	
Illinois	99.5 (0.24)	98.9 (0.58)	99.6 (0.23)	99.1 (0.41)	98.4 (0.70)	99.2 (0.39)	
Indiana	87.4 (2.48)	89.5 (2.63)	87.2 (2.69)	87.7 (2.44)	89.9 (2.91)	87.4 (2.53)	
Iowa	91.2 (1.88)	92.3 (1.78)	91.1 (2.01)	88.1 (2.48)	87.0 (3.30)	88.2 (2.48)	
Kansas	93.4 (1.35)	91.7 (2.55)	93.6 (1.39)	93.5 (1.18)	94.4 (1.82)	93.3 (1.25)	
Kentucky	94.4 (1.00)	94.0 (2.11)	94.5 (0.99)	90.7 (1.92)	91.5 (2.00)	90.6 (1.99)	
Louisiana	89.6 (1.68)	87.1 (2.47)	90.0 (1.69)	75.7 (4.02)	73.9 (4.61)	76.1 (4.09)	
Maine	94.9 (1.00)	95.1 (1.16)	94.9 (1.07)	93.8 (0.89)	93.0 (1.74)	93.9 (0.94)	
Maryland	93.6 (1.21)	94.5 (2.71)	93.6 (1.23)	94.0 (1.28)	91.9 (2.37)	94.3 (1.29)	
Massachusetts	88.0 (2.33)	83.6 (3.65)	88.9 (2.22)	89.2 (2.29)	89.2 (2.84)	89.2 (2.28)	
Michigan	85.4 (2.86)	85.6 (3.42)	85.4 (2.99)	87.6 (3.01)	93.6 (2.85)	86.9 (3.15)	
Minnesota	98.0 (0.78)	99.6 (0.39)	97.8 (0.84)	97.3 (1.11)	97.3 (1.27)	97.3 (1.14)	
Mississippi	92.8 (1.46)	93.3 (2.20)	92.7 (1.49)	95.0 (1.65)	95.5 (2.30)	94.9 (1.68)	

See notes at end of table.

TABLE A-46. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and state: 2013 and 2015—Continued

(Standard errors in parentheses)								
State	2013				2015			
	Total	Disability status		Total	Disability status			
		With a disability	Without a disability		With a disability	Without a disability		
Missouri	92.9 (2.24)	91.8 (2.74)	93.1 (2.26)	96.5 (1.20)	96.4 (1.29)	96.5 (1.23)		
Montana	92.6 (0.86)	93.0 (2.16)	92.6 (0.85)	94.9 (0.98)	94.9 (1.96)	94.9 (0.99)		
Nebraska	99.7 (0.29)	100.0 ¹ (†)	99.6 (0.33)	99.5 (0.33)	98.9 (0.64)	99.6 (0.33)		
Nevada	90.0 (0.47)	91.8 (1.35)	89.9 (0.52)	87.1 (0.95)	86.9 (2.85)	87.1 (0.92)		
New Hampshire	96.8 (0.87)	96.5 (1.38)	96.8 (0.82)	95.1 (0.73)	96.1 (1.21)	94.9 (0.78)		
New Jersey	97.4 (0.98)	95.9 (1.72)	97.6 (0.95)	97.0 (1.69)	98.4 (1.09)	96.7 (1.83)		
New Mexico	95.8 (0.49)	96.4 (1.22)	95.7 (0.47)	94.9 (1.23)	96.4 (1.36)	94.7 (1.32)		
New York	91.8 (1.44)	89.3 (1.91)	92.3 (1.50)	91.5 (1.34)	88.6 (2.66)	92.0 (1.36)		
North Carolina	89.4 (1.93)	91.7 (2.02)	89.1 (2.05)	92.7 (2.00)	91.7 (2.82)	92.9 (1.99)		
North Dakota	89.1 (0.37)	88.4 (1.50)	89.2 (0.43)	92.0 (0.40)	95.9 (1.35)	91.4 (0.44)		
Ohio	72.7 (3.04)	70.6 (4.03)	73.0 (3.10)	68.1 (3.02)	66.6 (4.26)	68.3 (2.98)		
Oklahoma	96.2 (1.22)	96.8 (1.22)	96.1 (1.28)	97.9 (1.17)	96.6 (1.77)	98.1 (1.11)		
Oregon	94.9 (1.31)	94.7 (1.51)	94.9 (1.35)	88.5 (2.37)	89.3 (3.21)	88.4 (2.46)		
Pennsylvania	95.2 (1.17)	92.5 (2.49)	95.7 (1.17)	95.2 (1.89)	96.7 (1.45)	95.0 (2.04)		
Rhode Island	92.1 (0.44)	90.3 (1.48)	92.4 (0.47)	96.5 (0.32)	95.9 (1.16)	96.6 (0.36)		
South Carolina	93.5 (1.51)	93.5 (2.19)	93.5 (1.50)	91.0 (1.48)	91.3 (2.45)	90.9 (1.58)		
South Dakota	87.9 (0.77)	84.9 (2.90)	88.2 (0.76)	92.4 (1.20)	91.6 (2.20)	92.5 (1.23)		
Tennessee	97.5 (1.03)	97.4 (1.28)	97.5 (1.07)	97.9 (0.92)	98.0 (1.02)	97.8 (1.01)		
Texas	91.5 (2.22)	93.1 (2.47)	91.4 (2.26)	89.9 (2.99)	87.2 (4.10)	90.2 (3.04)		
Utah	91.4 (1.66)	91.7 (1.99)	91.4 (1.70)	91.5 (1.81)	89.7 (2.67)	91.7 (1.84)		
Vermont	96.2 (0.25)	97.0 (0.83)	96.0 (0.29)	93.0 (0.44)	93.3 (1.51)	93.0 (0.53)		
Virginia	94.7 (1.11)	90.8 (2.54)	95.2 (1.06)	94.4 (1.27)	93.2 (2.49)	94.5 (1.32)		
Washington	91.3 (1.90)	91.3 (2.36)	91.2 (1.95)	90.3 (2.17)	91.8 (2.90)	90.2 (2.32)		
West Virginia	85.5 (1.73)	82.5 (3.07)	85.8 (1.72)	85.1 (2.10)	86.8 (3.05)	84.8 (2.20)		
Wisconsin	91.0 (2.03)	92.2 (1.73)	90.8 (2.22)	92.9 (1.66)	92.6 (2.15)	93.0 (1.71)		
Wyoming	99.9 (0.07)	99.1 (0.47)	100.0 ¹ (0.04)	91.9 (0.55)	96.9 (1.22)	91.1 (0.63)		
Department of Defense Dependents Schools	97.0 (0.28)	97.0 (1.54)	97.0 (0.30)	97.4 (0.26)	97.4 (0.88)	97.3 (0.27)		

† Not applicable.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-47. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by disability status and jurisdiction: 2013 and 2015

Jurisdiction	(Standard errors in parentheses)						
	2013				2015		
	Total	Disability status		Total	Disability status		
With a disability		Without a disability	With a disability		Without a disability		
Nation (public)	92.3 (0.36)	91.4 (0.47)	92.5 (0.38)	91.3 (0.47)	90.8 (0.61)	91.3 (0.49)	
Large city	89.9 (1.06)	88.7 (1.43)	90.0 (1.10)	87.4 (2.06)	85.9 (1.95)	87.6 (2.17)	
Albuquerque	95.1 (0.51)	95.1 (1.59)	95.1 (0.53)	98.1 (0.65)	94.1 (2.86)	98.7 (0.61)	
Atlanta	96.7 (0.25)	94.8 (2.24)	96.9 (0.27)	99.6 (0.19)	95.7 (1.87)	100.0 ¹ (†)	
Austin	92.5 (0.64)	95.8 (1.80)	92.1 (0.72)	99.9 (0.12)	99.1 (0.87)	100.0 ¹ (†)	
Baltimore City	85.3 (2.72)	‡ (†)	84.5 (2.86)	69.4 (5.45)	56.9 (7.99)	71.7 (5.53)	
Boston	94.9 (0.41)	93.6 (1.64)	95.2 (0.49)	88.1 (1.10)	94.5 (2.11)	87.0 (1.25)	
Charlotte	75.3 (1.31)	78.1 (3.26)	75.0 (1.38)	87.4 (1.09)	85.5 (4.38)	87.6 (1.12)	
Chicago	97.7 (1.31)	96.9 (1.97)	97.8 (1.29)	95.2 (2.17)	94.6 (2.48)	95.3 (2.16)	
Cleveland	79.4 (0.68)	86.8 (1.89)	77.1 (0.85)	71.5 (1.02)	73.8 (3.59)	70.9 (1.21)	
Dallas	89.0 (0.77)	83.3 (4.25)	89.4 (0.82)	91.6 (0.93)	‡ (†)	91.8 (0.96)	
Detroit	77.5 (2.33)	84.4 (4.52)	76.5 (2.48)	85.1 (0.63)	90.3 (2.20)	84.3 (0.81)	
District of Columbia (DCPS)	76.6 (1.23)	79.9 (3.07)	75.9 (1.47)	81.2 (1.31)	69.6 (4.85)	84.2 (1.02)	
Fresno	96.8 (0.49)	‡ (†)	96.7 (0.51)	88.6 (1.68)	‡ (†)	88.9 (1.71)	
Hillsborough County (FL)	94.5 (0.74)	91.0 (1.84)	95.1 (0.75)	95.0 (2.58)	95.6 (3.63)	94.9 (2.44)	
Houston	90.3 (1.50)	92.5 (2.24)	90.2 (1.64)	88.7 (1.53)	84.8 (5.35)	89.1 (1.51)	
Jefferson County (KY)	88.4 (0.84)	95.9 (1.76)	87.8 (0.89)	87.5 (2.85)	84.1 (5.53)	87.9 (2.74)	
Los Angeles	97.3 (0.57)	98.4 (1.01)	97.2 (0.58)	94.5 (1.54)	93.2 (2.62)	94.7 (1.52)	
Miami-Dade	93.5 (1.29)	94.9 (1.74)	93.4 (1.36)	90.7 (2.76)	90.6 (4.32)	90.7 (2.75)	
Milwaukee	94.1 (1.38)	90.6 (2.08)	95.0 (1.47)	— (†)	— (†)	— (†)	
New York City	90.0 (2.35)	86.9 (3.31)	90.5 (2.48)	83.9 (3.09)	80.0 (4.60)	84.8 (3.33)	
Philadelphia	93.0 (2.94)	93.6 (3.10)	92.9 (3.23)	96.3 (2.80)	95.0 (3.04)	96.5 (2.96)	
San Diego	98.0 (0.41)	97.4 (1.43)	98.1 (0.41)	93.0 (1.67)	95.0 (2.31)	92.8 (1.83)	
Duval County (FL)	— (†)	— (†)	— (†)	81.1 (2.63)	80.5 (3.68)	81.2 (2.83)	

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-48. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and selected school characteristics: 2013 and 2015

School characteristic	(Standard errors in parentheses)						
	2013				2015		
	Total	English language learner (ELL) status		Total	English language learner (ELL) status		
ELL		Not ELL	ELL		Not ELL		
Nation (public)	92.3 (0.36)	91.7 (0.97)	92.4 (0.36)	91.3 (0.47)	90.7 (1.01)	91.3 (0.46)	
Location							
City	90.8 (0.79)	89.4 (1.68)	90.9 (0.77)	88.8 (1.19)	87.1 (1.71)	89.0 (1.19)	
Suburban	93.8 (0.49)	93.6 (1.30)	93.8 (0.49)	93.0 (0.47)	94.9 (0.77)	92.8 (0.48)	
Town	90.8 (1.34)	94.2 (2.01)	90.6 (1.37)	91.5 (1.34)	91.6 (2.69)	91.4 (1.32)	
Rural	92.7 (0.76)	93.2 (1.39)	92.7 (0.77)	91.3 (0.96)	91.9 (3.08)	91.3 (0.94)	
Minority enrollment							
75 percent or more	90.4 (1.02)	90.4 (1.50)	90.3 (1.02)	88.1 (1.46)	89.4 (1.40)	87.9 (1.54)	
Less than 75 percent	93.0 (0.40)	93.4 (0.86)	92.9 (0.40)	92.4 (0.36)	92.9 (1.09)	92.4 (0.36)	

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-49. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015

(Standard errors in parentheses)												
State	2013					2015						
	Total	English language learner (ELL) status			Total	English language learner (ELL) status						
		ELL	Not ELL	ELL		Not ELL						
Nation (public)	92.3	(0.36)	91.7	(0.97)	92.4	(0.36)	91.3	(0.47)	90.7	(1.01)	91.3	(0.46)
Alabama	97.3	(1.12)	‡	(†)	97.4	(1.07)	97.8	(0.99)	‡	(†)	97.9	(0.99)
Alaska	94.0	(1.08)	85.1	(3.93)	95.2	(1.04)	92.8	(1.26)	72.9	(6.52)	95.6	(0.79)
Arizona	83.7	(2.20)	‡	(†)	84.0	(2.16)	77.4	(2.89)	‡	(†)	77.5	(2.92)
Arkansas	93.6	(1.36)	90.6	(3.00)	93.7	(1.37)	97.3	(1.12)	94.6	(3.17)	97.5	(1.10)
California	93.9	(1.54)	93.3	(2.27)	94.0	(1.54)	92.0	(1.51)	91.4	(2.71)	92.1	(1.63)
Colorado	94.1	(1.46)	93.5	(3.03)	94.2	(1.40)	87.3	(3.07)	88.5	(6.06)	87.2	(3.11)
Connecticut	97.2	(1.20)	89.3	(7.58)	97.4	(1.03)	96.0	(1.25)	‡	(†)	96.2	(1.16)
Delaware	98.2	(0.20)	‡	(†)	98.2	(0.20)	90.5	(0.55)	‡	(†)	90.5	(0.54)
District of Columbia	59.9	(0.78)	67.8	(5.50)	59.5	(0.79)	68.8	(0.87)	‡	(†)	69.7	(0.92)
Florida	94.5	(1.10)	91.4	(3.06)	94.6	(1.14)	91.4	(1.87)	92.6	(3.40)	91.4	(1.93)
Georgia	97.0	(1.31)	93.4	(6.27)	97.0	(1.31)	97.1	(1.09)	95.6	(2.79)	97.2	(1.09)
Hawaii	94.6	(0.46)	94.8	(1.48)	94.6	(0.51)	93.2	(1.11)	94.1	(2.52)	93.2	(1.08)
Idaho	98.2	(0.47)	100.0 ¹	(†)	98.1	(0.49)	94.7	(1.04)	‡	(†)	94.8	(1.00)
Illinois	99.5	(0.24)	97.4	(1.72)	99.6	(0.19)	99.1	(0.41)	100.0 ¹	(†)	99.1	(0.43)
Indiana	87.4	(2.48)	86.1	(6.81)	87.5	(2.50)	87.7	(2.44)	87.9	(4.54)	87.7	(2.48)
Iowa	91.2	(1.88)	‡	(†)	91.3	(1.91)	88.1	(2.48)	91.6	(3.75)	88.0	(2.55)
Kansas	93.4	(1.35)	93.2	(2.85)	93.4	(1.37)	93.5	(1.18)	91.1	(3.45)	93.7	(1.10)
Kentucky	94.4	(1.00)	95.3	(1.92)	94.4	(1.01)	90.7	(1.92)	90.0	(4.54)	90.7	(1.94)
Louisiana	89.6	(1.68)	‡	(†)	89.7	(1.72)	75.7	(4.02)	‡	(†)	75.8	(4.04)
Maine	94.9	(1.00)	‡	(†)	94.9	(1.01)	93.8	(0.89)	‡	(†)	93.8	(0.90)
Maryland	93.6	(1.21)	‡	(†)	93.6	(1.24)	94.0	(1.28)	96.9	(1.63)	93.9	(1.30)
Massachusetts	88.0	(2.33)	91.0	(2.72)	87.9	(2.42)	89.2	(2.29)	89.4	(3.76)	89.2	(2.38)
Michigan	85.4	(2.86)	83.2	(8.67)	85.5	(2.88)	87.6	(3.01)	94.2	(3.22)	87.4	(3.09)
Minnesota	98.0	(0.78)	97.6	(1.37)	98.0	(0.79)	97.3	(1.11)	97.2	(1.79)	97.3	(1.12)
Mississippi	92.8	(1.46)	‡	(†)	92.8	(1.46)	95.0	(1.65)	‡	(†)	94.9	(1.65)
Missouri	92.9	(2.24)	‡	(†)	92.8	(2.27)	96.5	(1.20)	‡	(†)	96.4	(1.22)
Montana	92.6	(0.86)	‡	(†)	92.8	(0.83)	94.9	(0.98)	‡	(†)	94.8	(0.99)
Nebraska	99.7	(0.29)	‡	(†)	99.7	(0.30)	99.5	(0.33)	‡	(†)	99.5	(0.34)
Nevada	90.0	(0.47)	85.5	(2.42)	90.4	(0.49)	87.1	(0.95)	86.5	(2.11)	87.2	(1.04)
New Hampshire	96.8	(0.87)	‡	(†)	96.7	(0.88)	95.1	(0.73)	‡	(†)	95.1	(0.74)
New Jersey	97.4	(0.98)	‡	(†)	97.4	(0.99)	97.0	(1.69)	‡	(†)	97.1	(1.70)
New Mexico	95.8	(0.49)	93.4	(1.19)	96.1	(0.52)	94.9	(1.23)	93.6	(2.08)	95.1	(1.22)
New York	91.8	(1.44)	87.5	(3.82)	92.1	(1.44)	91.5	(1.34)	81.8	(5.45)	92.0	(1.29)
North Carolina	89.4	(1.93)	85.1	(4.69)	89.6	(1.92)	92.7	(2.00)	89.1	(4.55)	92.9	(1.97)
North Dakota	89.1	(0.37)	‡	(†)	89.0	(0.37)	92.0	(0.40)	‡	(†)	91.9	(0.40)
Ohio	72.7	(3.04)	79.8	(7.35)	72.6	(3.04)	68.1	(3.02)	89.0	(6.56)	67.4	(3.12)
Oklahoma	96.2	(1.22)	83.9	(7.68)	96.7	(1.02)	97.9	(1.17)	100.0 ¹	(†)	97.8	(1.23)
Oregon	94.9	(1.31)	94.4	(2.86)	94.9	(1.31)	88.5	(2.37)	‡	(†)	88.6	(2.37)
Pennsylvania	95.2	(1.17)	91.3	(3.16)	95.3	(1.18)	95.2	(1.89)	94.3	(4.58)	95.3	(1.88)
Rhode Island	92.1	(0.44)	100.0 ¹	(†)	91.8	(0.46)	96.5	(0.32)	97.9	(1.44)	96.4	(0.34)
South Carolina	93.5	(1.51)	93.7	(3.35)	93.5	(1.50)	91.0	(1.48)	91.3	(4.42)	91.0	(1.49)
South Dakota	87.9	(0.77)	‡	(†)	88.1	(0.77)	92.4	(1.20)	‡	(†)	92.4	(1.18)
Tennessee	97.5	(1.03)	‡	(†)	97.6	(1.04)	97.9	(0.92)	‡	(†)	97.9	(0.91)
Texas	91.5	(2.22)	94.1	(2.06)	91.3	(2.38)	89.9	(2.99)	89.0	(3.38)	90.0	(3.04)
Utah	91.4	(1.66)	90.5	(4.57)	91.4	(1.66)	91.5	(1.81)	‡	(†)	91.5	(1.82)

See notes at end of table.

TABLE A-49. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and state: 2013 and 2015—Continued

State	(Standard errors in parentheses)						
	2013			2015			
	Total	English language learner (ELL) status		Total	English language learner (ELL) status		
ELL		Not ELL	ELL		Not ELL		
Vermont	96.2 (0.25)	‡ (†)	96.2 (0.25)	93.0 (0.44)	‡ (†)	93.1 (0.45)	
Virginia	94.7 (1.11)	93.4 (2.86)	94.8 (1.12)	94.4 (1.27)	93.9 (3.27)	94.4 (1.28)	
Washington	91.3 (1.90)	84.0 (4.60)	91.6 (1.87)	90.3 (2.17)	96.5 (1.90)	89.9 (2.29)	
West Virginia	85.5 (1.73)	‡ (†)	85.5 (1.74)	85.1 (2.10)	‡ (†)	85.1 (2.11)	
Wisconsin	91.0 (2.03)	90.0 (2.94)	91.0 (2.09)	92.9 (1.66)	85.9 (5.22)	93.2 (1.66)	
Wyoming	99.9 (0.07)	‡ (†)	99.8 (0.07)	91.9 (0.55)	‡ (†)	91.9 (0.56)	
Department of Defense Dependents Schools	97.0 (0.28)	‡ (†)	97.0 (0.28)	97.4 (0.26)	‡ (†)	97.2 (0.27)	

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-50. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by English language learner status and jurisdiction: 2013 and 2015

Jurisdiction	(Standard errors in parentheses)						
	2013			2015			
	Total	English language learner (ELL) status		Total	English language learner (ELL) status		
ELL		Not ELL	ELL		Not ELL		
Nation (public)	92.3 (0.36)	91.7 (0.97)	92.4 (0.36)	91.3 (0.47)	90.7 (1.01)	91.3 (0.46)	
Large city	89.9 (1.06)	89.4 (2.06)	89.9 (1.04)	87.4 (2.06)	86.1 (2.82)	87.5 (2.12)	
Albuquerque	95.1 (0.51)	93.0 (1.57)	95.5 (0.51)	98.1 (0.65)	92.2 (3.11)	98.8 (0.49)	
Atlanta	96.7 (0.25)	‡ (†)	96.6 (0.25)	99.6 (0.19)	‡ (†)	99.6 (0.20)	
Austin	92.5 (0.64)	98.4 (0.93)	91.5 (0.73)	99.9 (0.12)	99.2 (0.76)	100.0 ¹ (†)	
Baltimore City	85.3 (2.72)	‡ (†)	85.5 (2.71)	69.4 (5.45)	‡ (†)	69.1 (5.40)	
Boston	94.9 (0.41)	91.0 (1.64)	96.1 (0.38)	88.1 (1.10)	89.0 (1.97)	87.9 (1.38)	
Charlotte	75.3 (1.31)	77.6 (4.03)	75.2 (1.37)	87.4 (1.09)	‡ (†)	87.4 (1.12)	
Chicago	97.7 (1.31)	91.1 (5.75)	98.2 (1.04)	95.2 (2.17)	100.0 ¹ (†)	94.8 (2.34)	
Cleveland	79.4 (0.68)	92.9 (2.25)	78.4 (0.71)	71.5 (1.02)	‡ (†)	71.8 (1.08)	
Dallas	89.0 (0.77)	89.0 (1.66)	89.0 (0.99)	91.6 (0.93)	89.9 (1.83)	92.5 (1.11)	
Detroit	77.5 (2.33)	‡ (†)	74.2 (2.60)	85.1 (0.63)	94.8 (1.24)	83.4 (0.70)	
District of Columbia (DCPS)	76.6 (1.23)	‡ (†)	77.4 (1.27)	81.2 (1.31)	‡ (†)	83.5 (1.32)	
Fresno	96.8 (0.49)	100.0 ¹ (†)	96.4 (0.55)	88.6 (1.68)	90.6 (3.27)	88.1 (2.03)	
Hillsborough County (FL)	94.5 (0.74)	90.3 (3.26)	94.8 (0.72)	95.0 (2.58)	‡ (†)	94.6 (2.85)	
Houston	90.3 (1.50)	87.4 (3.06)	90.9 (1.45)	88.7 (1.53)	93.5 (2.40)	87.9 (1.59)	
Jefferson County (KY)	88.4 (0.84)	‡ (†)	88.5 (0.81)	87.5 (2.85)	‡ (†)	87.3 (2.94)	
Los Angeles	97.3 (0.57)	95.8 (1.44)	97.5 (0.58)	94.5 (1.54)	94.1 (2.93)	94.5 (1.55)	
Miami-Dade	93.5 (1.29)	88.9 (5.95)	94.1 (1.04)	90.7 (2.76)	94.5 (4.29)	90.2 (2.80)	
Milwaukee	94.1 (1.38)	83.9 (7.03)	95.1 (0.99)	— (†)	— (†)	— (†)	
New York City	90.0 (2.35)	87.3 (3.83)	90.4 (2.55)	83.9 (3.09)	73.8 (7.66)	84.9 (2.96)	
Philadelphia	93.0 (2.94)	‡ (†)	93.3 (2.91)	96.3 (2.80)	‡ (†)	96.3 (2.73)	
San Diego	98.0 (0.41)	95.5 (1.86)	98.4 (0.37)	93.0 (1.67)	94.5 (2.38)	92.8 (1.68)	
Duval County (FL)	— (†)	— (†)	— (†)	81.1 (2.63)	‡ (†)	80.7 (2.62)	

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-51. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and selected school characteristics: 2013 and 2015

(Standard errors in parentheses)								
School characteristic	2013				2015			
	Total	National School Lunch Program (NSLP) status		Total	National School Lunch Program (NSLP) status			
		NSLP eligible	Not NSLP eligible		NSLP eligible	Not NSLP eligible		
Nation (public)	92.3 (0.36)	91.8 (0.46)	92.8 (0.42)	91.3 (0.47)	90.0 (0.69)	92.7 (0.41)		
Location								
City	90.8 (0.79)	89.6 (0.96)	92.7 (0.78)	88.8 (1.19)	87.0 (1.64)	92.5 (0.84)		
Suburban	93.8 (0.49)	93.9 (0.84)	93.7 (0.48)	93.0 (0.47)	92.0 (0.70)	93.6 (0.49)		
Town	90.8 (1.34)	91.3 (1.21)	90.2 (1.74)	91.5 (1.34)	90.8 (1.73)	92.1 (1.40)		
Rural	92.7 (0.76)	92.8 (0.79)	92.6 (0.86)	91.3 (0.96)	91.2 (1.26)	91.3 (0.93)		
Minority enrollment								
75 percent or more	90.4 (1.02)	89.8 (1.04)	92.3 (1.16)	88.1 (1.46)	87.6 (1.48)	90.2 (1.89)		
Less than 75 percent	93.0 (0.40)	93.1 (0.45)	92.8 (0.46)	92.4 (0.36)	91.7 (0.52)	93.0 (0.38)		

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-52. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015

(Standard errors in parentheses)								
State	2013				2015			
	Total	National School Lunch Program (NSLP) status		Total	National School Lunch Program (NSLP) status			
		NSLP eligible	Not NSLP eligible		NSLP eligible	Not NSLP eligible		
Nation (public)	92.3 (0.36)	91.8 (0.46)	92.8 (0.42)	91.3 (0.47)	90.0 (0.69)	92.7 (0.41)		
Alabama	97.3 (1.12)	96.2 (1.77)	98.6 (0.75)	97.8 (0.99)	97.1 (1.31)	98.8 (0.84)		
Alaska	94.0 (1.08)	90.5 (1.80)	97.0 (0.84)	92.8 (1.26)	88.8 (2.31)	96.6 (0.73)		
Arizona	83.7 (2.20)	82.2 (2.85)	85.6 (2.70)	77.4 (2.89)	79.2 (3.54)	80.3 (4.20)		
Arkansas	93.6 (1.36)	94.2 (1.11)	92.8 (2.36)	97.3 (1.12)	97.6 (0.88)	96.7 (1.90)		
California	93.9 (1.54)	92.6 (1.99)	95.4 (1.33)	92.0 (1.51)	89.3 (2.14)	95.2 (1.43)		
Colorado	94.1 (1.46)	92.5 (2.64)	95.2 (1.17)	87.3 (3.07)	83.3 (4.78)	90.4 (2.24)		
Connecticut	97.2 (1.20)	95.4 (2.78)	98.1 (0.94)	96.0 (1.25)	93.4 (2.42)	97.3 (0.93)		
Delaware	98.2 (0.20)	97.2 (0.39)	99.1 (0.26)	90.5 (0.55)	87.0 (1.17)	93.0 (0.75)		
District of Columbia	59.9 (0.78)	63.7 (0.98)	54.2 (2.16)	68.8 (0.87)	69.3 (1.07)	66.9 (2.36)		
Florida	94.5 (1.10)	93.8 (1.13)	95.3 (1.40)	91.4 (1.87)	90.8 (2.16)	92.4 (1.88)		
Georgia	97.0 (1.31)	96.1 (1.67)	98.2 (0.93)	97.1 (1.09)	97.0 (1.23)	96.9 (1.50)		
Hawaii	94.6 (0.46)	94.1 (0.74)	95.1 (0.65)	93.2 (1.11)	92.5 (1.68)	94.0 (1.09)		
Idaho	98.2 (0.47)	98.0 (0.59)	98.3 (0.51)	94.7 (1.04)	95.3 (1.21)	94.4 (1.26)		
Illinois	99.5 (0.24)	99.1 (0.52)	99.9 (0.07)	99.1 (0.41)	98.6 (0.63)	99.5 (0.29)		
Indiana	87.4 (2.48)	88.4 (3.32)	86.7 (2.66)	87.7 (2.44)	88.2 (3.29)	87.3 (2.69)		
Iowa	91.2 (1.88)	91.1 (1.93)	91.3 (2.09)	88.1 (2.48)	88.0 (2.99)	88.2 (2.58)		
Kansas	93.4 (1.35)	92.3 (1.90)	94.2 (1.07)	93.5 (1.18)	92.9 (1.58)	94.1 (1.09)		
Kentucky	94.4 (1.00)	93.7 (1.38)	95.1 (0.93)	90.7 (1.92)	92.2 (1.67)	88.9 (2.44)		
Louisiana	89.6 (1.68)	89.1 (1.89)	90.5 (1.94)	75.7 (4.02)	72.7 (4.64)	80.8 (4.54)		
Maine	94.9 (1.00)	94.5 (1.20)	95.2 (1.06)	93.8 (0.89)	94.0 (1.24)	93.6 (0.90)		
Maryland	93.6 (1.21)	91.5 (1.57)	94.9 (1.28)	94.0 (1.28)	91.8 (1.48)	95.5 (1.50)		
Massachusetts	88.0 (2.33)	89.1 (2.35)	87.3 (2.66)	89.2 (2.29)	86.9 (3.17)	90.9 (2.46)		
Michigan	85.4 (2.86)	85.5 (3.77)	85.4 (2.98)	87.6 (3.01)	86.8 (4.16)	88.4 (3.03)		
Minnesota	98.0 (0.78)	98.1 (0.82)	97.9 (0.82)	97.3 (1.11)	96.6 (1.53)	97.7 (1.04)		
Mississippi	92.8 (1.46)	92.1 (1.60)	94.2 (1.71)	95.0 (1.65)	94.5 (1.80)	96.0 (1.66)		

See notes at end of table.

TABLE A-52. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and state: 2013 and 2015—Continued

(Standard errors in parentheses)								
State	2013				2015			
	Total	National School Lunch Program (NSLP) status		Not NSLP eligible	Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible			NSLP eligible	Not NSLP eligible	
Missouri	92.9 (2.24)	90.7 (3.36)	94.8 (1.62)	96.5 (1.20)	95.2 (2.32)	97.5 (0.75)		
Montana	92.6 (0.86)	89.6 (1.57)	94.6 (0.67)	94.9 (0.98)	95.0 (1.09)	94.7 (1.14)		
Nebraska	99.7 (0.29)	99.8 (0.16)	99.5 (0.41)	99.5 (0.33)	99.3 (0.44)	99.6 (0.29)		
Nevada	90.0 (0.47)	87.7 (0.76)	92.9 (0.73)	87.1 (0.95)	83.0 (1.52)	91.8 (0.99)		
New Hampshire	96.8 (0.87)	97.1 (0.93)	96.9 (0.85)	95.1 (0.73)	97.5 (0.84)	94.0 (0.90)		
New Jersey	97.4 (0.98)	97.7 (1.35)	97.2 (1.10)	97.0 (1.69)	96.7 (1.88)	97.1 (1.70)		
New Mexico	95.8 (0.49)	96.4 (0.49)	94.5 (0.78)	94.9 (1.23)	95.4 (1.01)	93.6 (2.24)		
New York	91.8 (1.44)	92.1 (1.62)	91.7 (1.85)	91.5 (1.34)	89.8 (1.80)	93.7 (1.53)		
North Carolina	89.4 (1.93)	88.1 (1.92)	90.9 (2.84)	92.7 (2.00)	89.6 (3.10)	97.0 (1.12)		
North Dakota	89.1 (0.37)	89.0 (1.03)	89.1 (0.49)	92.0 (0.40)	93.9 (0.94)	91.2 (0.50)		
Ohio	72.7 (3.04)	71.0 (4.31)	73.9 (3.19)	68.1 (3.02)	69.9 (4.01)	66.4 (3.67)		
Oklahoma	96.2 (1.22)	94.8 (1.97)	97.8 (0.66)	97.9 (1.17)	98.4 (0.79)	97.3 (1.87)		
Oregon	94.9 (1.31)	94.8 (1.45)	94.8 (1.44)	88.5 (2.37)	88.4 (2.92)	88.7 (2.54)		
Pennsylvania	95.2 (1.17)	95.8 (1.10)	94.8 (1.44)	95.2 (1.89)	92.5 (3.48)	97.5 (1.70)		
Rhode Island	92.1 (0.44)	90.7 (0.80)	93.1 (0.57)	96.5 (0.32)	96.0 (0.52)	96.9 (0.44)		
South Carolina	93.5 (1.51)	92.1 (2.07)	95.1 (1.34)	91.0 (1.48)	88.0 (2.26)	94.7 (1.37)		
South Dakota	87.9 (0.77)	85.4 (1.53)	89.2 (0.75)	92.4 (1.20)	91.9 (1.74)	92.5 (1.26)		
Tennessee	97.5 (1.03)	96.9 (1.31)	98.1 (0.94)	97.9 (0.92)	97.7 (1.30)	98.1 (0.95)		
Texas	91.5 (2.22)	92.0 (1.87)	90.8 (3.20)	89.9 (2.99)	88.4 (3.85)	91.9 (2.35)		
Utah	91.4 (1.66)	91.6 (2.08)	91.3 (1.65)	91.5 (1.81)	90.0 (2.28)	92.2 (1.77)		
Vermont	96.2 (0.25)	95.4 (0.54)	96.7 (0.31)	93.0 (0.44)	91.7 (1.00)	93.9 (0.59)		
Virginia	94.7 (1.11)	95.3 (1.59)	94.5 (1.17)	94.4 (1.27)	93.7 (1.68)	94.7 (1.26)		
Washington	91.3 (1.90)	91.2 (2.21)	91.3 (2.12)	90.3 (2.17)	91.3 (2.18)	89.5 (2.68)		
West Virginia	85.5 (1.73)	85.2 (2.41)	85.9 (1.77)	85.1 (2.10)	86.0 (2.34)	83.4 (2.82)		
Wisconsin	91.0 (2.03)	92.2 (1.68)	90.1 (2.49)	92.9 (1.66)	89.7 (3.16)	94.6 (1.63)		
Wyoming	99.9 (0.07)	99.8 (0.13)	99.9 (0.08)	91.9 (0.55)	93.4 (0.94)	90.9 (0.80)		
Department of Defense Dependents Schools	97.0 (0.28)	‡ (†)	‡ (†)	97.4 (0.26)	‡ (†)	‡ (†)		

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.

TABLE A-53. Percentage of 8th-grade public school students who have a reading teacher with a permanent teaching certificate, by National School Lunch Program status and jurisdiction: 2013 and 2015

(Standard errors in parentheses)							
Jurisdiction	2013			2015			
	Total	National School Lunch Program (NSLP) status		Total	National School Lunch Program (NSLP) status		Not NSLP eligible
		NSLP eligible	Not NSLP eligible		NSLP eligible	Not NSLP eligible	
Nation (public)	92.3 (0.36)	91.8 (0.46)	92.8 (0.42)	91.3 (0.47)	90.0 (0.69)	92.7 (0.41)	
Large city	89.9 (1.06)	89.2 (1.19)	91.3 (1.27)	87.4 (2.06)	85.9 (2.50)	91.5 (1.52)	
Albuquerque	95.1 (0.51)	94.5 (0.62)	96.2 (0.78)	98.1 (0.65)	97.1 (1.03)	99.6 (0.40)	
Atlanta	96.7 (0.25)	96.6 (0.37)	97.2 (1.06)	99.6 (0.19)	99.5 (0.24)	100.0 ¹ (†)	
Austin	92.5 (0.64)	94.8 (0.79)	88.9 (1.39)	99.9 (0.12)	99.8 (0.21)	100.0 ¹ (†)	
Baltimore City	85.3 (2.72)	84.2 (3.09)	90.1 (2.77)	69.4 (5.45)	66.2 (5.91)	81.9 (4.74)	
Boston	94.9 (0.41)	93.7 (0.53)	99.2 (0.06)	88.1 (1.10)	88.1 (1.10)	† (†)	
Charlotte	75.3 (1.31)	67.4 (1.77)	84.7 (1.52)	87.4 (1.09)	82.4 (1.87)	93.8 (1.01)	
Chicago	97.7 (1.31)	97.5 (1.52)	98.7 (1.14)	95.2 (2.17)	95.7 (1.92)	92.2 (5.44)	
Cleveland	79.4 (0.68)	79.4 (0.68)	† (†)	71.5 (1.02)	71.5 (1.02)	† (†)	
Dallas	89.0 (0.77)	89.4 (0.78)	85.5 (3.94)	91.6 (0.93)	91.5 (0.99)	92.8 (1.90)	
Detroit	77.5 (2.33)	81.4 (2.48)	54.1 (5.56)	85.1 (0.63)	87.0 (1.01)	79.6 (2.20)	
District of Columbia (DCPS)	76.6 (1.23)	80.2 (1.40)	68.9 (2.75)	81.2 (1.31)	77.5 (1.52)	100.0 ¹ (†)	
Fresno	96.8 (0.49)	96.5 (0.57)	99.3 (0.73)	88.6 (1.68)	87.2 (1.85)	† (†)	
Hillsborough County (FL)	94.5 (0.74)	92.8 (1.12)	96.7 (0.89)	95.0 (2.58)	92.2 (4.06)	99.2 (0.79)	
Houston	90.3 (1.50)	89.3 (1.71)	93.9 (1.61)	88.7 (1.53)	89.0 (1.45)	88.0 (2.90)	
Jefferson County (KY)	88.4 (0.84)	88.3 (1.10)	88.6 (1.38)	87.5 (2.85)	90.5 (2.32)	82.8 (3.99)	
Los Angeles	97.3 (0.57)	96.7 (0.71)	98.9 (0.86)	94.5 (1.54)	94.4 (1.60)	94.9 (2.48)	
Miami-Dade	93.5 (1.29)	93.5 (2.05)	93.5 (4.13)	90.7 (2.76)	90.7 (2.74)	90.7 (4.73)	
Milwaukee	94.1 (1.38)	94.1 (1.48)	94.6 (2.01)	— (†)	— (†)	— (†)	
New York City	90.0 (2.35)	89.3 (2.39)	94.2 (1.74)	83.9 (3.09)	83.1 (3.47)	86.5 (2.82)	
Philadelphia	93.0 (2.94)	93.6 (2.56)	88.8 (9.37)	96.3 (2.80)	94.3 (4.26)	98.8 (1.07)	
San Diego	98.0 (0.41)	96.5 (0.76)	100.0 ¹ (†)	93.0 (1.67)	93.3 (2.21)	92.6 (1.52)	
Duval County (FL)	— (†)	— (†)	— (†)	81.1 (2.63)	78.4 (2.68)	82.9 (2.94)	

— Not available.

† Not applicable.

‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

¹ Rounds to 100 percent.

NOTE: Teachers of the students assessed were asked "Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?" This table includes teachers who selected the response option "Yes, I hold a permanent certificate." The other response options were "Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)," "No, but I am currently working toward certification," and "No, and I am not planning to obtain certification."

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2013 and 2015 Reading Assessments.