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Trends in Public and Private School Principal Demographics and Qualifications: 1987–88 to 2011–12

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Statistics in Brief publications present descriptive data in tabular formats to provide useful information to a broad audience, including members of the general public. They address simple and topical issues and questions. They do not investigate more complex hypotheses, account for inter-relationships among variables, or support causal inferences. We encourage readers who are interested in more complex questions and in-depth analysis to explore other NCES resources, including publications, online data tools, and public- and restricted-use datasets. See nces.ed.gov and references noted in the body of this document for more information.

Principals play a key role

in student achievement: research has found that effective principals' leadership and support of teachers is associated with gains in student achievement in as little as a single school year (Baker and Cooper 2005; Branch, Hanushek, and Rivkin 2013; Grissom, Loeb, and Master 2013). Recent federal programs, such as Race to the Top, have recognized the importance of principals by emphasizing the need for principal evaluations and support for strong principal leadership (U.S. Department of Education 2009).

Principals leave their positions every year through retiring, transferring to other schools, or accepting other work. Among principals in 2011–12, one in five had left their school by 2012–13 (Goldring and Taie 2014). Have these shifts in the principal workforce produced new principals who differ from their more experienced colleagues (Battle 2010)?

Changes in student and teacher demographics, new school models, and school management techniques are well documented (Aud, Fox, and KewalRamani 2010; Snyder and Dillow 2013). However, few studies have examined principals' demographics: how their current education, experience, and compensation compares with that of earlier decades

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and whether today's characteristics and changes over time differ between public and private school principals.

Because principals are often drawn from the pool of teachers, readers should consider how changing teacher demographics—such as sex, race and ethnicity, and salary—may affect changing principal demographics. For example, while the proportion of female principals in public schools was larger in 2011–12 than in 1987–88 (51.6 percent vs. 24.6 percent, respectively; Snyder and Dillow 2013), the proportion of female teachers was also higher in 2011–12 than in 1987–88 (76.3 percent vs. 70.5 percent, respectively). Although a causal analysis such as this is beyond the scope of this report, future research should consider investigating similar relationships.

DATA, MEASURES, AND METHODS

Using data from seven administrations of the Schools and Staffing Survey (SASS), this Statistics in Brief

examines trends in public and private school principal¹ demographics, experience, and compensation over 25 years, from 1987–88 through 2011–12. Data are drawn from the 1987–88, 1990–91, 1993–94, 1999–2000, 2003–04, 2007–08, and 2011–12 survey administrations. Principals of the sampled public and private schools provided information about their characteristics, experience, and compensation via written surveys or interviews.

Public schools include both traditional public schools and public charter schools. Schools are divided into three grade-level categories: elementary (any of grades kindergarten through 6, no grade higher than 8); secondary (any of grades 7 through 12, none lower than 7); or combined (ungraded or spanning both elementary and secondary grades as defined here). Among all of the principal characteristics collected by the SASS principal survey, this report uses those characteristics that were consistently collected during each administration.

Estimates are produced from cross-tabulations of the data, and *t* tests are performed to test for differences between estimates. All estimates and comparisons that are discussed in this brief are statistically significant at the $p < .05$ level to ensure that they are larger than what might be expected due to sampling variation. No corrections are made for multiple comparisons. As a result, an increase in Type I error is possible. Type I error is the observation of a statistical difference when, in fact, there is none. Readers are cautioned not to make causal inferences about the data presented here. For more information, see **Technical Notes** at the end of the report.

¹ A school principal was not strictly defined in SASS. After sample selection of a school, the Census Bureau contacted each school to identify the principal, and then mailed and addressed the principal questionnaire to that person. If no principal was identified during the school calling operation, the Census Bureau addressed the questionnaire to the "school head/principal." No additional guidance was provided to the school to determine the identity of the principal.

STUDY QUESTIONS

1 How have selected demographics among principals changed between 1987–88 and 2011–12?

2 How have the education, experience, and salaries of principals changed between 1987–88 and 2011–12?

3 Did new public and private school principals in 2011–12 differ from their more experienced colleagues? Have these differences changed over time?

KEY FINDINGS

- The percentage of female principals increased in public schools between 1987–88 and 2011–12, from 25 to 52 percent (figure 1). In private schools, while the percentage of female principals did not change, a greater percentage of private school principals were female compared with their public school counterparts across all school years, except for 2007–08.²
- More public school principals reported a master's degree as their highest level of education in 2011–12 compared with 1987–88 (figure 4). However, fewer public school principals held a degree higher than a master's in 2011–12 than in 1987–88. Among private schools principals, the percentages at all degree levels remained unchanged since 1987–88.
- Principals in elementary, secondary, and combined public and private schools earned higher salaries in 2011–12 than in 1987–88, even after adjusting for inflation (figures 7, 8).
- In public schools, female principals were more evenly represented among experienced principals in 1987–88 than in 2011–12: 12 versus 47 percent, respectively (figure 9). During the 2011–12 school year, 54 percent of new public school principals were women.
- Among new public school principals in 2011–12, more reported a master's as their highest degree (67 percent) than did their experienced counterparts (53 percent; figure 12). This was a reversal from 1987–88, when 49 percent of new principals held a master's degree as their highest degree, compared with 57 percent of experienced principals.

² All estimates and comparisons that are discussed in this brief are statistically significant at the $p < .05$ level to ensure that they are larger than what might be expected due to sampling variation.

1

How have selected demographics among principals changed between 1987–88 and 2011–12?

From the 1987–88 school year to the 2011–12 school year, the total number of school principals in the United States grew from 103,290 to 115,540, a gain of 12 percent (calculated from table 1).³ This increase only occurred in the public sector; the number of private school principals did not change significantly between these years.

By the 2011–12 school year, a total of 89,810 principals worked in public schools, up 15 percent from 77,890 in 1987–88. The number of school principals increased within both public elementary and secondary schools. The number of principals in public elementary schools increased 18 percent, from 51,850 in 1987–88

to 61,250 in 2011–12. In public secondary schools, the number of principals increased 11 percent, from 18,390 to 20,470 during this time. There was no significant growth in the number of private school principals at the elementary or secondary levels.

TABLE 1.

Number of school principals, by sector and school level: Selected years, 1987–88 through 2011–12

Sector and school level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
All schools	103,290	102,770	104,630	110,020	115,310	118,430	115,540
All public schools	77,890	78,890	79,620	83,790	87,620	90,470	89,810
Elementary	51,850	54,050	53,680	60,110	61,480	62,340	61,250
Secondary	18,390	18,930	18,260	20,450	19,700	21,550	20,470
Combined	4,350	3,800	2,750	3,230	6,450	6,580	8,090
Unknown	3,300	2,110	4,930	†	†	†	†
All private schools	25,400	23,880	25,020	26,230	27,690	27,960	25,730
Elementary	15,120	13,670	13,350	15,810	16,750	16,110	14,510
Secondary	2,270	2,220	2,300	2,630	2,510	2,930	2,660
Combined	6,650	5,870	6,770	7,800	8,430	8,920	8,570
Unknown	1,360	2,120	2,590	†	†	†	†

† Not applicable.

NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Unknown school level is due to school nonresponse. Detail may not sum to totals because of rounding.

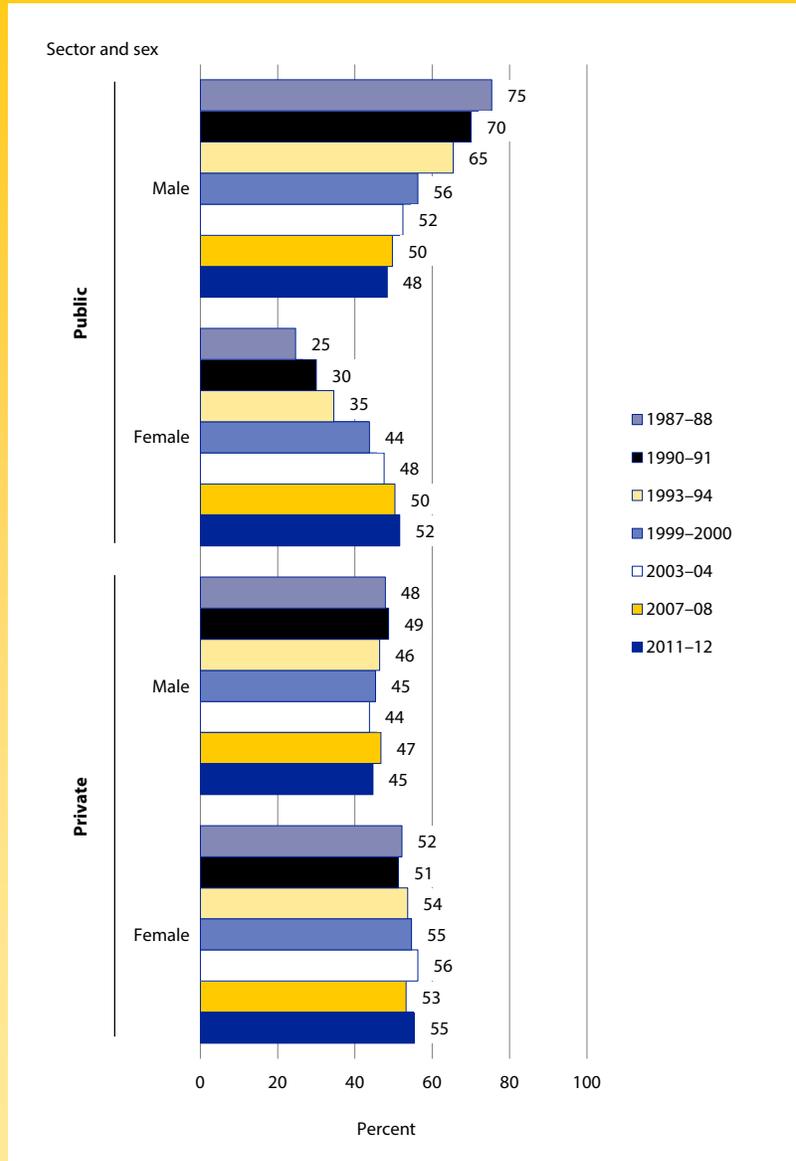
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

³ The SASS principal questionnaire is administered to one principal at each sampled school, and was not designed to represent the total number of staff serving as principals, vice principals, or assistant principals.

Over the 24-year span shown in figure 1, the percentage of female principals increased in public schools, from 25 percent of all principals in 1987–88 to 52 percent in 2011–12. However, private schools had significantly greater percentages of female principals than did their public counterparts in all years except 2007–08. In private schools, the proportion of female principals was 52 percent in school year 1987–88 and 55 percent in school year 2011–12.

FIGURE 1.

Percentage distribution of school principals, by sector and sex: Selected years, 1987–88 through 2011–12



NOTE: Detail may not sum to totals because of rounding.
 SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Although principals in U.S. public and private schools were predominantly White, the proportion of White principals decreased between 1987–88 and 2011–12 in both public and private schools (figure 2).

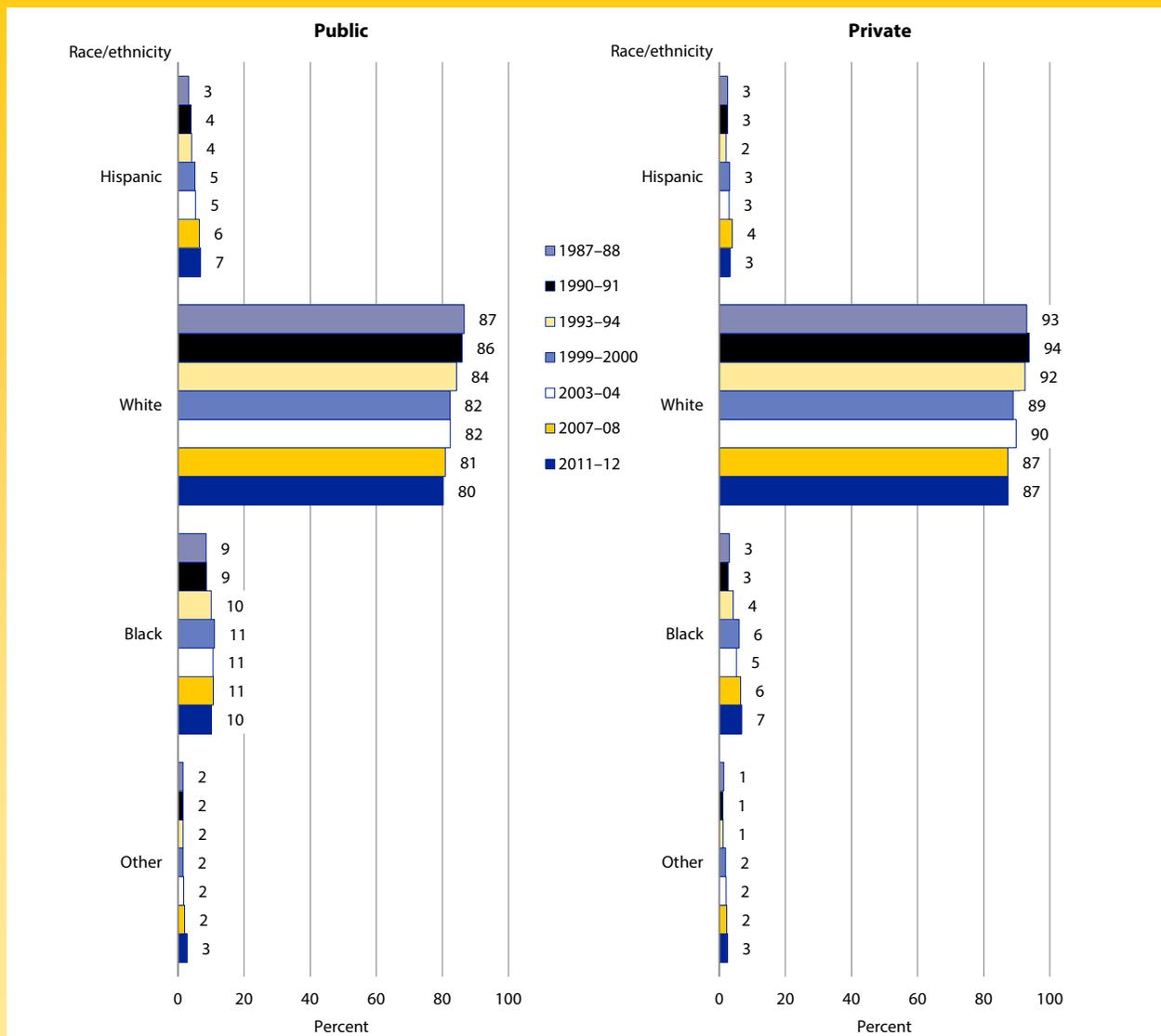
Among public schools, the percentage of White principals

declined from 87 percent in 1987–88 to 80 percent in 2011–12. During the same time period, the percentage of Black principals did not change significantly, and the percentage of Hispanic principals increased by 4 percentage points from 3 to 7 percent.

Private schools also saw a decrease in the percentage of White principals from 93 percent in 1987–88 to 87 percent in 2011–12. The percentage of Black principals increased in private schools by 4 percentage points from 3 to 7 percent, but the percentage of Hispanic principals did not change significantly.

FIGURE 2.

Percentage distribution of school principals, by sector and race/ethnicity: Selected years, 1987–88 through 2011–12



NOTE: Black includes African American and Hispanic includes Latino. Other includes American Indian/Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; or Two or more races. Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

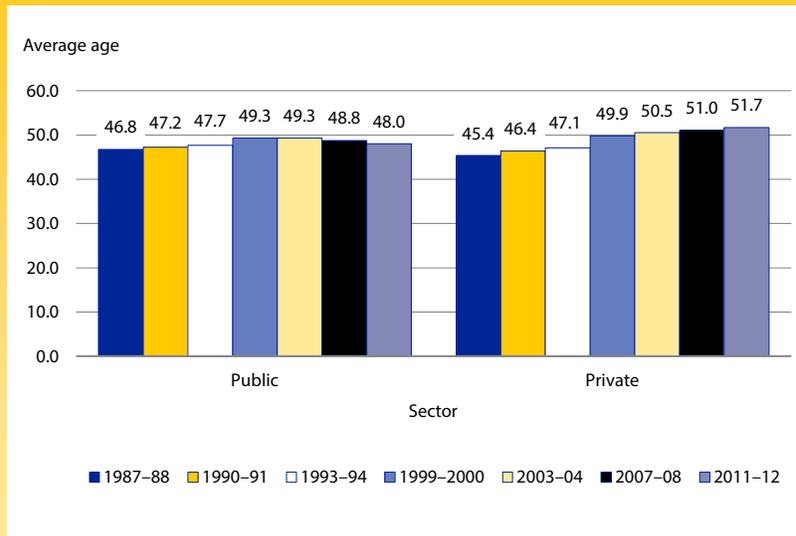
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

As shown in figure 3, public school principals in 1987–88 were an average of 1.4 years older than their private school peers: 46.8 years and 45.4 years, respectively. By 2011–12 this had changed, and private school principals were, on average, 3.7 years older than public school principals (calculated from figure 3).

The change in average age over time was significant within the public and private sectors as well as between them. The average age of public school principals increased from 46.8 years in 1987–88 to 49.3 years in 1999–2000, but then decreased to 48.0 years in 2011–12. This pattern was not seen among private school principals, where the average age increased from 45.4 years in 1987–88 to 51.7 years in 2011–12.

FIGURE 3.

Average age of school principals, by sector: Selected years, 1987–88 through 2011–12



NOTE: Age was calculated by subtracting the principal's reported year of birth from the fall of the associated school year, e.g., 2011 in school year 2011–12.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

2

How have the education, experience, and salaries of principals changed between 1987–88 and 2011–12?

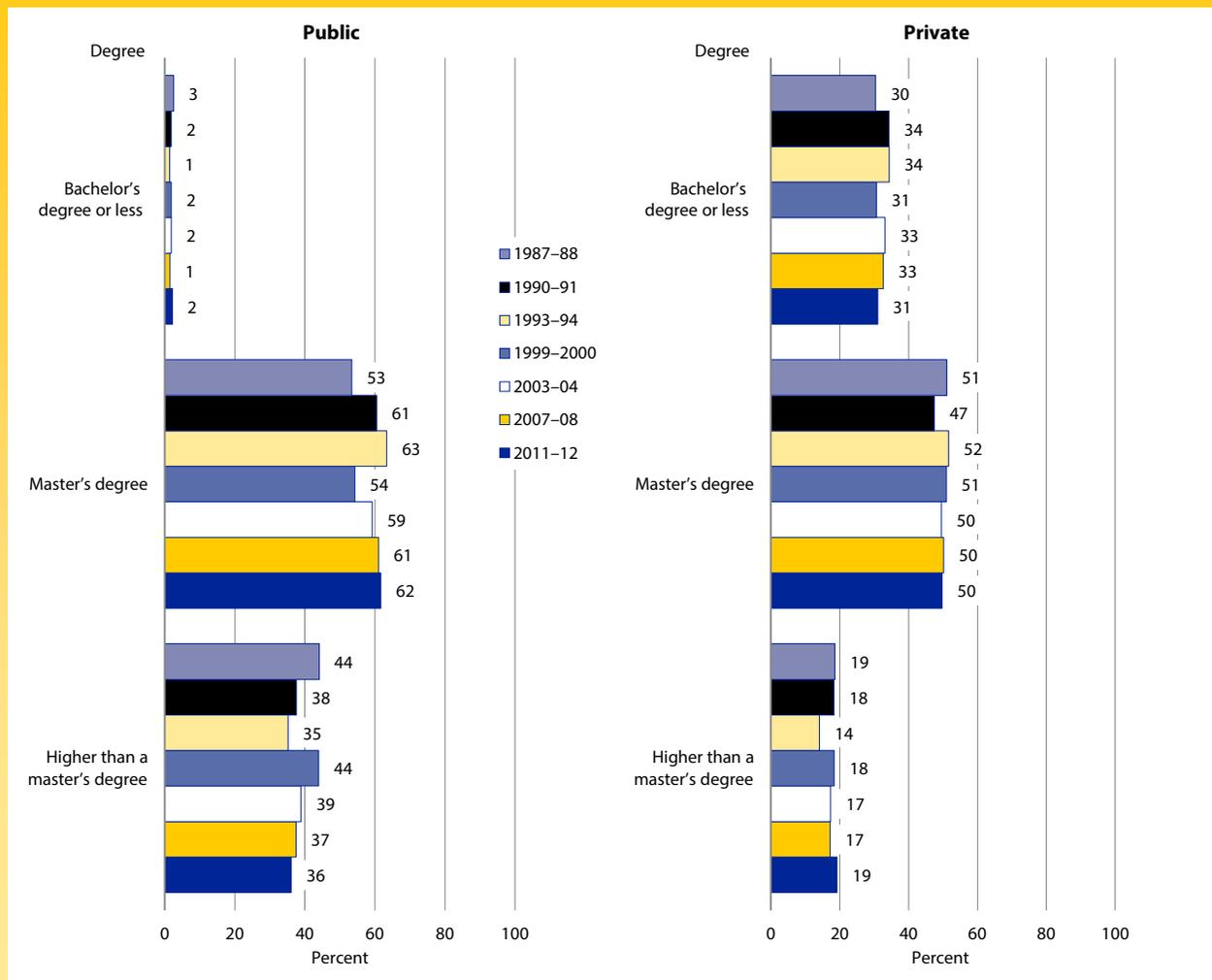
Across school years 1987–88 through 2011–12, between 1 and 3 percent of public school principals reported that their highest academic degree was a bachelor's or less (figure 4). The

percentage of public school principals with a master's degree was greater in 2011–12 than in 1987–88: 62 percent and 53 percent, respectively. However, the percentage with

a degree higher than a master's (e.g., an education specialist diploma, first-professional degree, or PhD) was smaller in 2011–12 (36 percent) than in 1987–88 (44 percent).

FIGURE 4.

Percentage distribution of school principals, by sector and highest degree: Selected years, 1987–88 through 2011–12



NOTE: Degrees higher than a master's degree include the education specialist or professional diploma degree and Doctorate or first professional degree. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Among private schools principals, the percentages at all degree levels did not change significantly between 1987–88 and 2011–12. In 2011–12, 31 percent of private school principals held a bachelor’s degree or less as their highest degree, and 50 percent held a master’s degree.

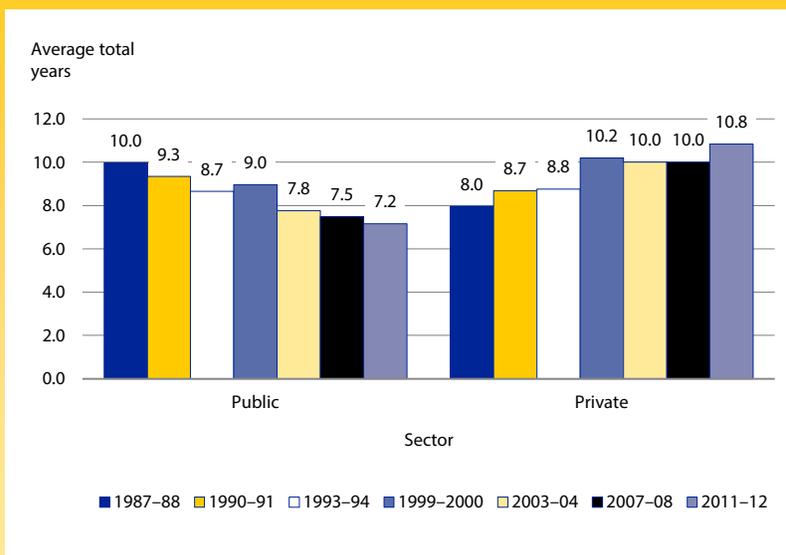
When comparing public to private school principals in 2011–12, a higher percentage of the former held a master’s (62 percent among public, 50 percent among private schools) or higher degree (36 percent and 19 percent, respectively). Some 31 percent of private school principals compared with 2 percent of public school principals had attained a bachelor’s degree or less.

In 1987–88, public school principals averaged 10.0 years of experience working as a principal (figure 5). By 2011–12, the average years of experience as a principal had decreased to 7.2 years. In contrast, in private schools, principals’ years of experience increased from 8.0 to 10.8 years during the same time.

Public school principals had about one less year of teaching experience in 2011–12 (12.2 years) compared with 1987–88 (13.3 years) (figure 6). However, there was no significant difference among private school principals’ years of experience between 1987–88 and 2011–12. In each school year between 1987–88 and 2011–12, private school principals had more teaching experience than public school principals.

FIGURE 5.

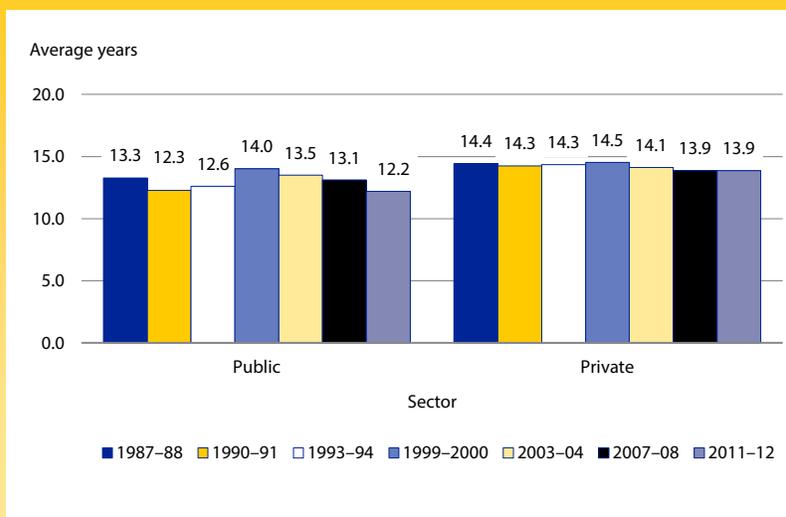
Average total years of experience as a school principal, by sector: Selected years, 1987–88 through 2011–12



SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

FIGURE 6.

Average years of teaching experience of school principals, by sector: Selected years, 1987–88 through 2011–12

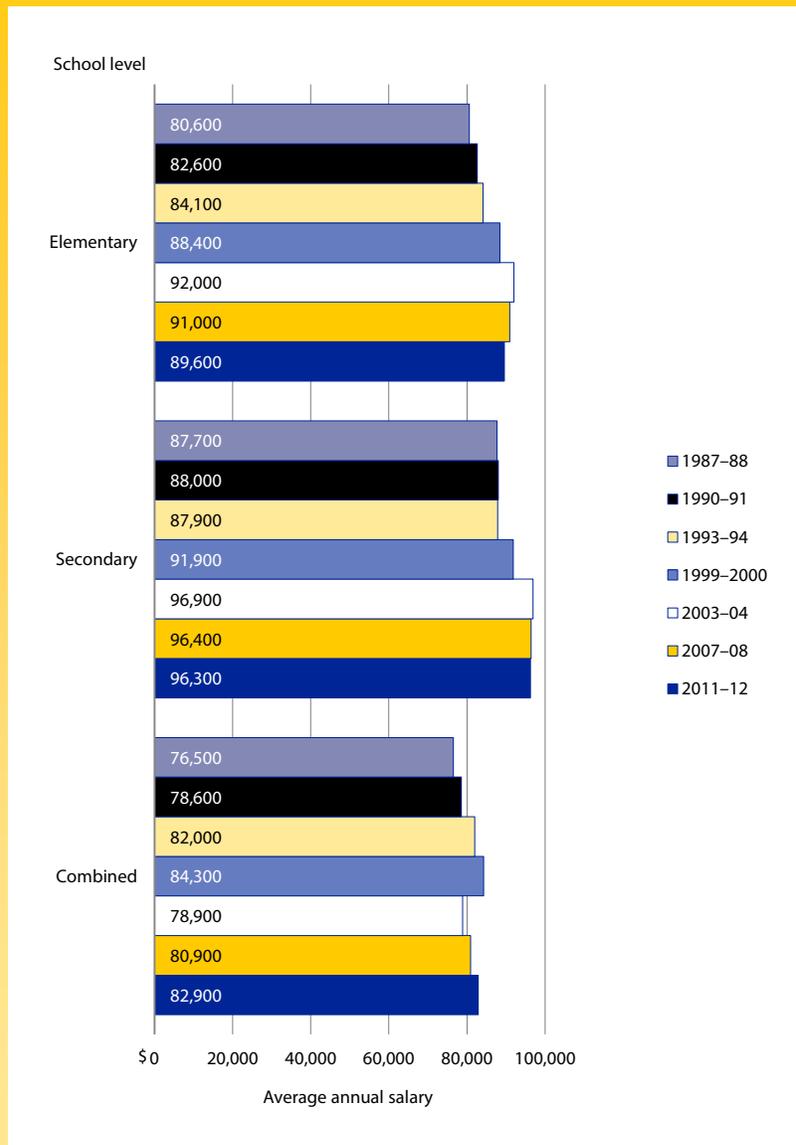


NOTE: Teaching experience includes the total number of years teaching, including before and since becoming a principal. SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

Public school principals at all levels earned more in 2011–12 than in 1987–88 (adjusted to 2012 constant dollars; figure 7). The average salary for public elementary school principals increased from \$80,600 to \$92,600 over the 16-year span and from \$87,700 to \$96,900 for those in secondary schools. The salaries for both groups remained level from 2003–04 through 2011–12. The difference between the 2011–12 salaries of elementary and secondary school principals was statistically significant. Additional analyses using the median salaries of private school principals produced similar conclusions.

FIGURE 7.

Average annual salary (in 2012 dollars) for public school principals, by school level: Selected years, 1987–88 through 2011–12



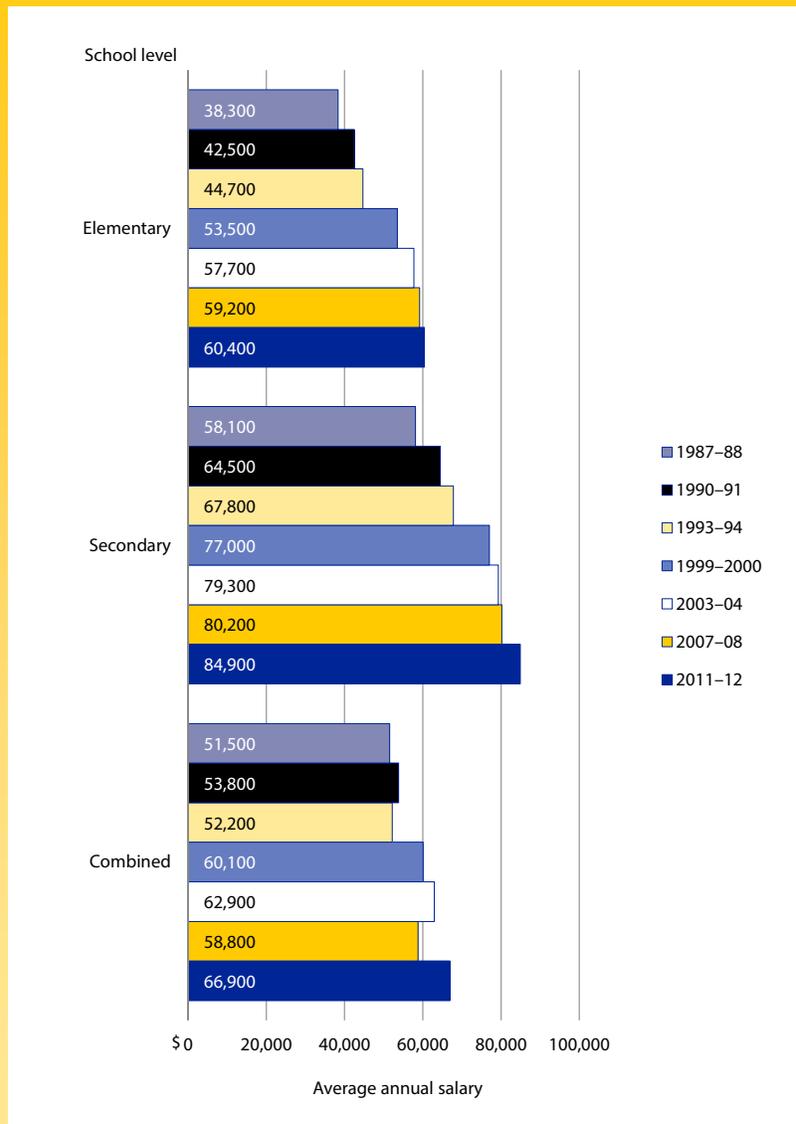
NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information is missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 3,300 in 1987–88, 2,110 in 1990–91, and 4,930 in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Principals in private elementary, secondary, and combined schools also earned more in 2011–12 than 1987–88 (figure 8). In 2012 constant dollars, the average annual salary for private elementary school principals increased from \$38,300 to \$60,400, and increased for private secondary school principals from \$58,100 to \$84,900. By 2011–12, the average annual salary for private secondary principals was significantly larger than that for private elementary school principals. With the exception of secondary school principals in 2011–12, elementary and secondary public school principals earned more than did their private school peers during each year since 1987–88. Additional analyses using the median salaries of private school principals produced similar conclusions.

FIGURE 8.

Average annual salary (in 2012 dollars) for private school principals, by school level: Selected years, 1987–88 through 2011–12



NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 1,360 in 1987–88, 2,120 in 1990–91, and 2,590 in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

3

Did new public and private school principals in 2011–12 differ from their more experienced colleagues? Have these differences changed over time?

Among new public school principals (3 or fewer years of experience as a principal), 67 percent administered an elementary school in 2011–12 (table 2). Some 23 percent worked at a secondary school and 10 percent were in combined schools. The breakdown was similar among experienced principals (those with more than 10 years as a principal).

TABLE 2.

Percentage distribution of new and experienced school principals, by sector, year and experience level: Selected years, 1987–88 through 2011–12

Year and experience level	Public				Private			
	Elementary	Secondary	Combined	Unknown	Elementary	Secondary	Combined	Unknown
1987–88								
New principals	65.3	22.4	6.8	5.4	57.7	9.5	27.2	5.6
Experienced principals	69.5	22.3	4.3	3.8	65.5	7.7	21.0	5.7
Difference between new and experienced	-4.2	‡	2.5	1.6 !	-7.8	‡	6.2 !	-0.1
1990–91								
New principals	68.0	22.8	6.3	3.0	57.7	8.5	27.6	6.1
Experienced principals	69.8	23.8	4.0	2.4	59.2	8.5	21.9	10.3
Difference between new and experienced	-1.8	-1.0	2.3	‡	-1.5	‡	5.7 !	-4.2
1993–94								
New principals	66.4	23.2	4.1	6.3	50.4	10.7	28.0	10.9
Experienced principals	68.9	21.9	2.9	6.3	59.1	7.3	24.4	9.2
Difference between new and experienced	-2.4	‡	1.1 !	‡	-8.7	3.4 !	‡	‡
1999–2000								
New principals	70.8	24.7	4.5	†	62.7	8.2	29.1	†
Experienced principals	74.1	22.4	3.5	†	61.2	10.0	28.8	†
Difference between new and experienced	-3.3	2.3 !	1.0 !	†	‡	-1.8	‡	†
2003–04								
New principals	69.2	22.2	8.7	†	63.0	8.7	28.3	†
Experienced principals	72.0	21.4	6.6	†	60.2	8.2	31.6	†
Difference between new and experienced	-2.8	‡	2.1 !	†	‡	‡	-3.3	†
2007–08								
New principals	67.5	24.3	8.2	†	58.8	9.9	31.3	†
Experienced principals	71.0	22.4	6.6	†	57.9	10.2	31.9	†
Difference between new and experienced	-3.5	‡	‡	†	‡	-0.3	-0.6	†
2011–12								
New principals	67.4	22.7	10.0	†	61.5	8.2	30.3	†
Experienced principals	67.8	22.5	9.7	†	53.3	10.8	35.9	†
Difference between new and experienced	-0.5	‡	‡	†	8.2 !	-2.6	-5.6	†

† Not applicable.

! Interpret data with caution.

‡ Reporting standards not met.

NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Unknown school level is due to school nonresponse. New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Approximately 68 percent worked at an elementary school, 23 percent at a high school, and 10 percent at a combined school.

Women were more evenly represented among public school principals in 2011–12 than in 1987–88. During the 2011–12 school year, 54 percent of new and 47 percent of experienced public school principals were women (figure 9). The percentages were larger than in 1987–88, when 41 percent of new and 12 percent of experienced public school principals were women.

In private schools, the percentage difference between new and experienced female principals in 2011–12 did not differ significantly from that in 1987–88.

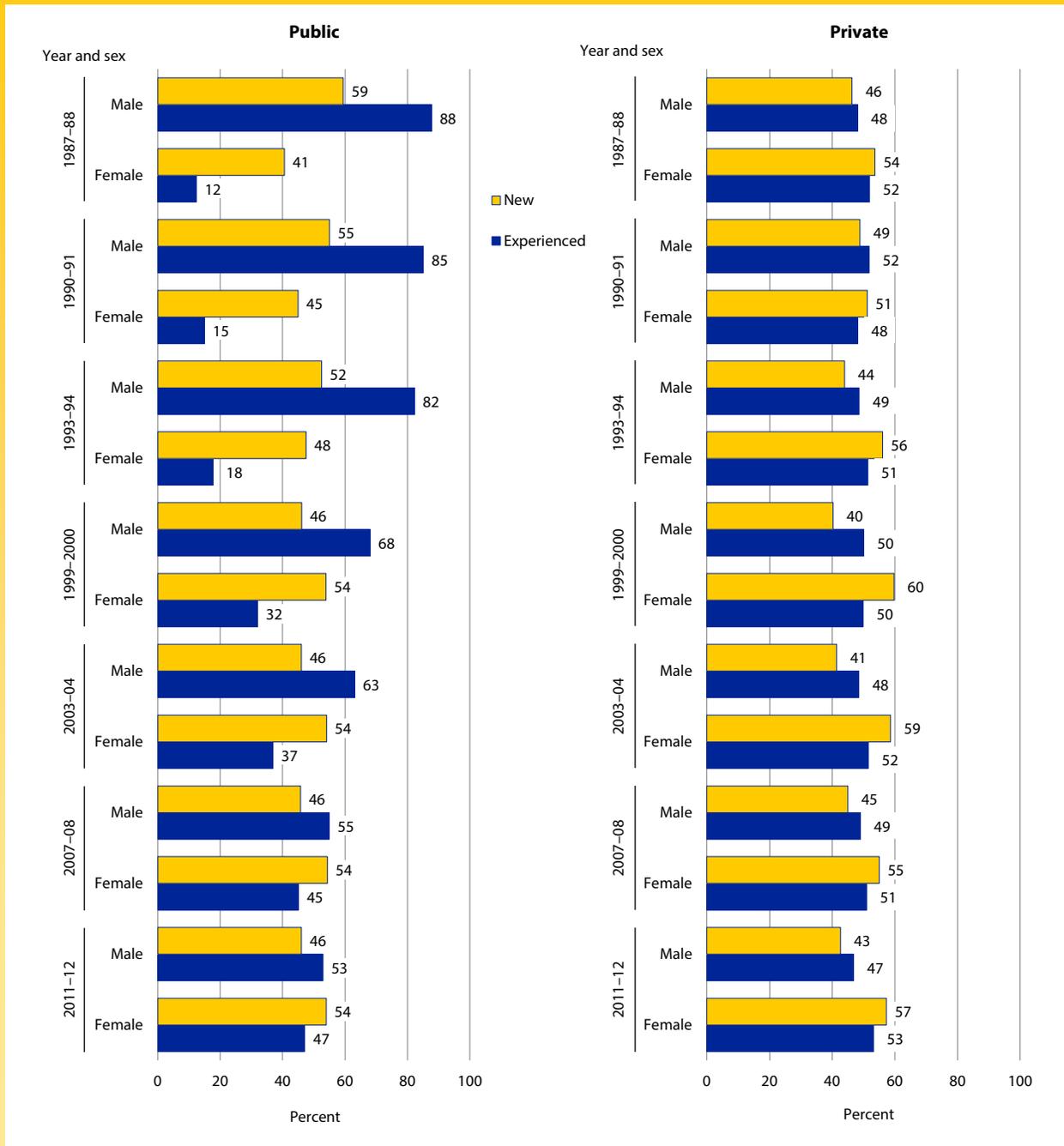
At public schools, the percentage of new White principals (77 percent) was lower than the percentage of experienced White principals (84 percent) (figure 10) in 2011–12. The percentages of new Black and Hispanic principals were higher than the percentages of their experienced colleagues. For example, Black principals comprised

11 percent of all new public school principals, compared with 8 percent of all experienced principals in public schools. New Hispanic public school principals accounted for approximately 8 percent of all new principals in 2011–12, compared with approximately 5 percent of all experienced Hispanic principals.⁴

⁴ There were no differences between new and experienced private school principals of any race or ethnicity in either the 1987–88 or 2011–12 school years. However, additional analysis suggests that the difference between percentages of new and experienced White principals increased over the 14 years between the 1993–94 and 2007–08 school years. The percentage was then significantly lower during the 2011–12 school year than the 2007–08 school year.

FIGURE 9.

Percentage distribution of new and experienced school principals, by sector, year, and sex: Selected years, 1987–88 through 2011–12

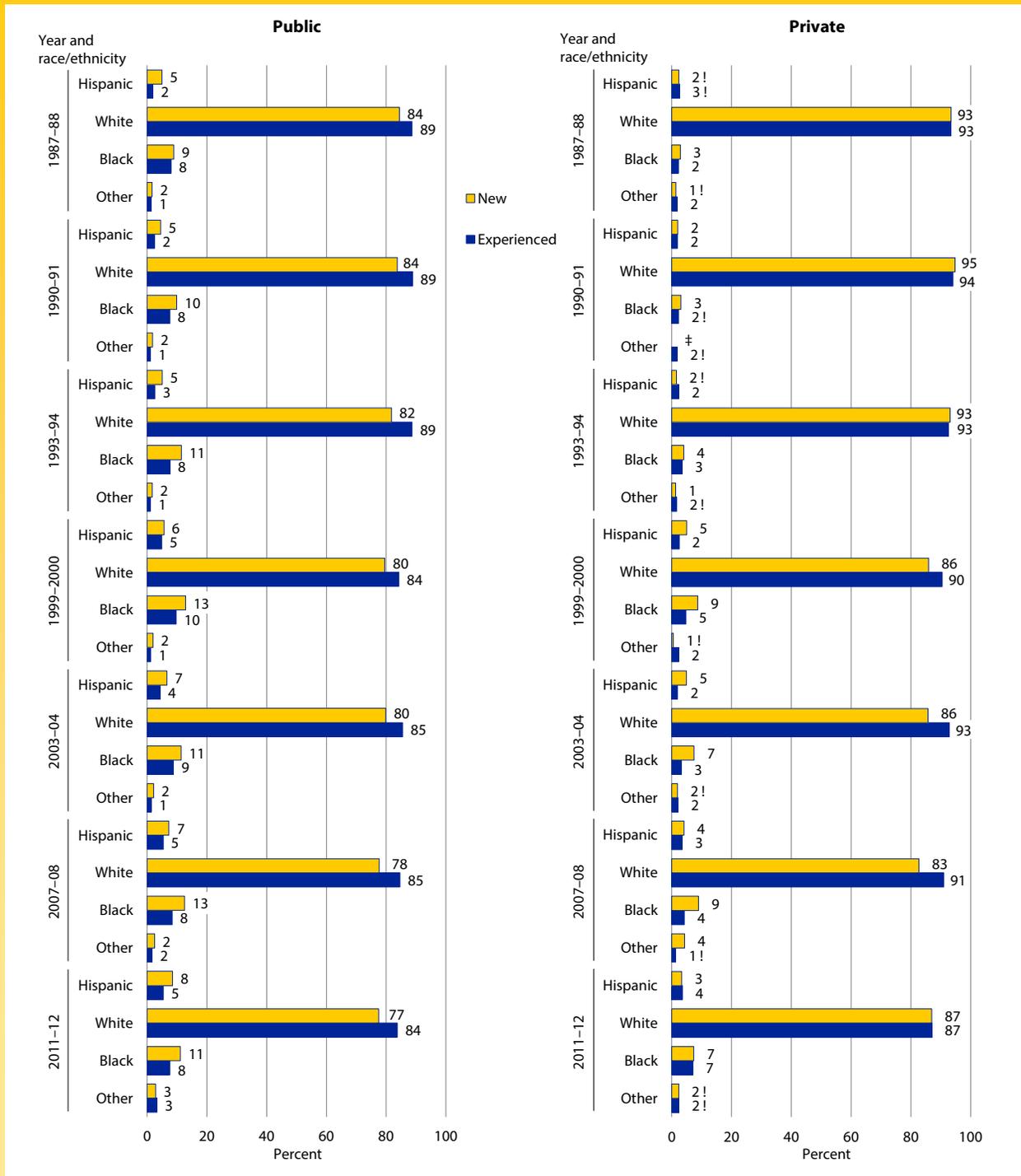


NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

FIGURE 10.

Percentage distribution of new and experienced school principals, by sector, year, and race/ethnicity: Selected years, 1987–88 through 2011–12



! Interpret data with caution.

‡ Reporting standards not met.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Black includes African American and Hispanic includes Latino. Other includes American Indian/Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; or Two or more races. Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Experienced principals were, unsurprisingly, older than new principals in both public and private schools; however, the differences in age were wider in 2011–12 than 1987–88 (figure 11). Specifically, the average age of new principals was 43.0 years in 2011–12, while experienced principals were on average 11.6 years older (54.6 years old). The difference between the ages of new and experienced public school principals was smaller in 1987–88, an average of 8.7 years.

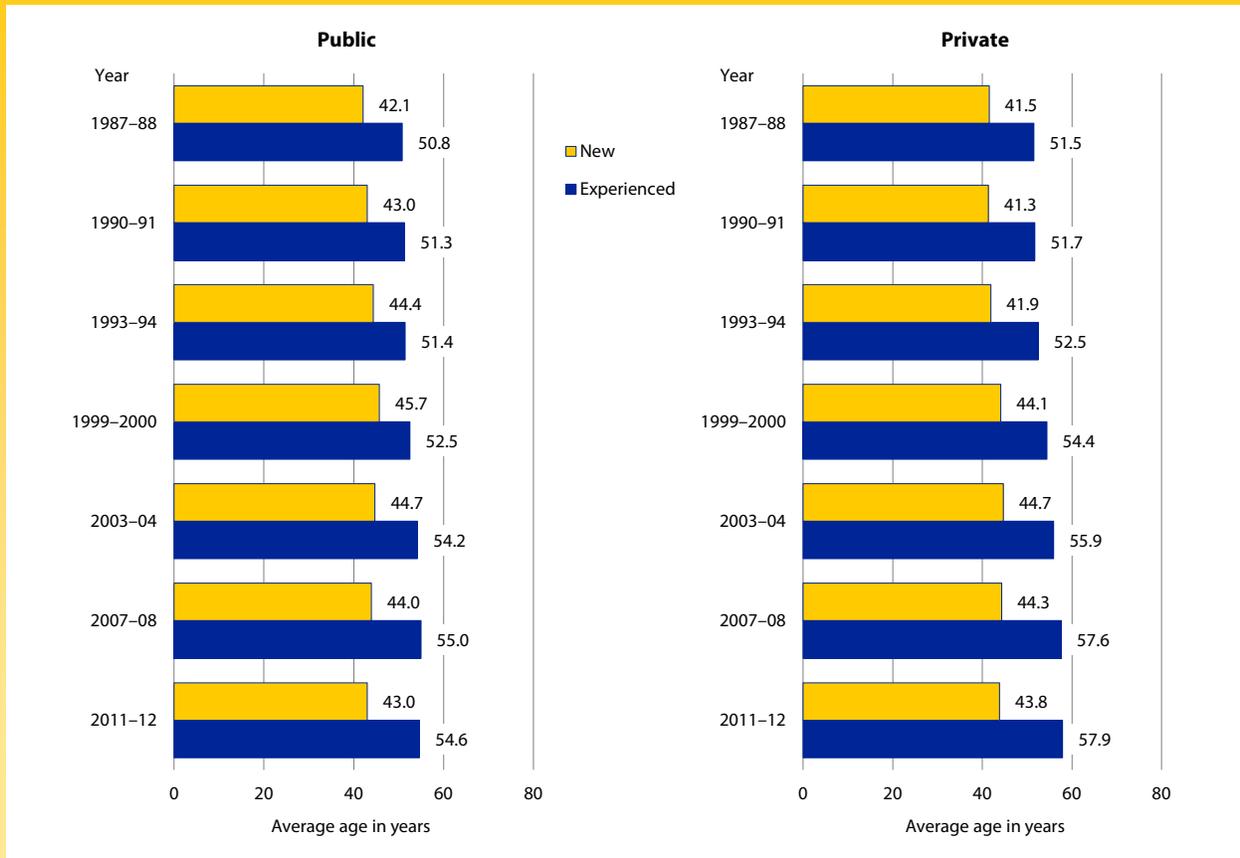
Similarly, the average age of new principals at private schools in 2011–12 was 43.8 years, some 14.1 years younger than the average age of 57.9 years among experienced principals. This difference was greater than that in 1987–88 (an average of 10 years).

In 2011–12, more new public school principals held a master’s degree (as their highest degree) than their experienced counterparts, which was a reversal from 1987–88. Specifically,

some 67 percent of new principals held a master’s degree as their highest degree, compared with 53 percent of experienced principals (figure 12). This 13 percent difference in 2011–12 was, in absolute distance, 22 percentage points from the difference in 1987–88, when a smaller percentage of new principals (49 percent) held a master’s degree as their highest degree, compared with experienced principals (57 percent).

FIGURE 11.

Average age of new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12

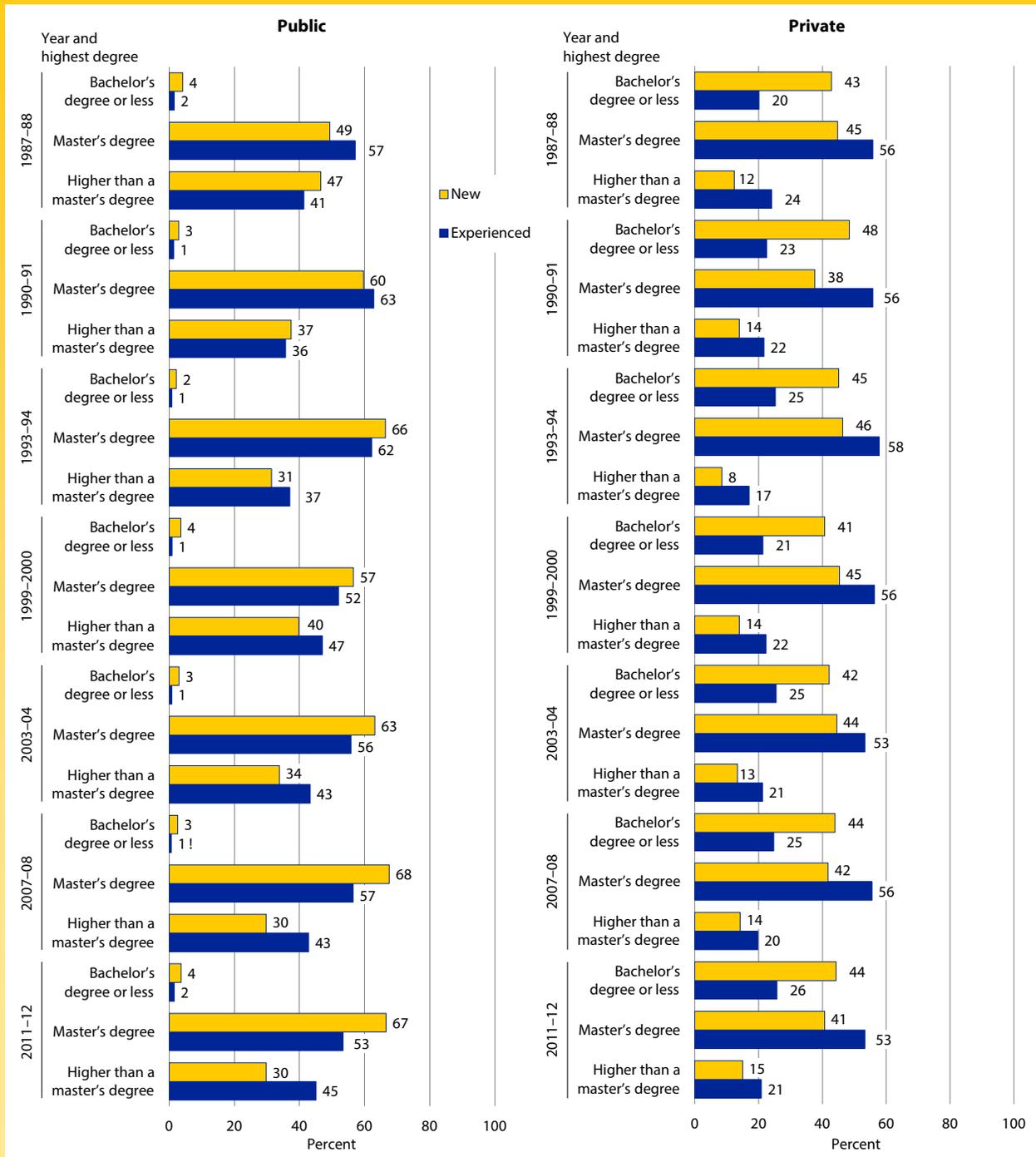


NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Age was calculated by subtracting the principal’s reported year of birth from the fall of the associated school year, e.g., 2011 in school year 2011–12.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

FIGURE 12.

Percentage distribution of new and experienced school principals, by sector, year, and highest degree: Selected years, 1987–88 through 2011–12



! Interpret data with caution.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Degrees higher than a master's degree include the education specialist or professional diploma degree and Doctorate or first professional degree. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

During the 2011–12 school year, a larger proportion of experienced public school principals (45 percent) held degrees higher than a master’s when compared with new principals (30 percent). Conversely, during the 1987–88 school year, fewer experienced principals held higher than a master’s degree compared with new principals (41 percent vs. 47 percent, respectively).

At private schools, 44 percent of new principals in 2011–12 held a bachelor’s degree or less, compared with 26 percent

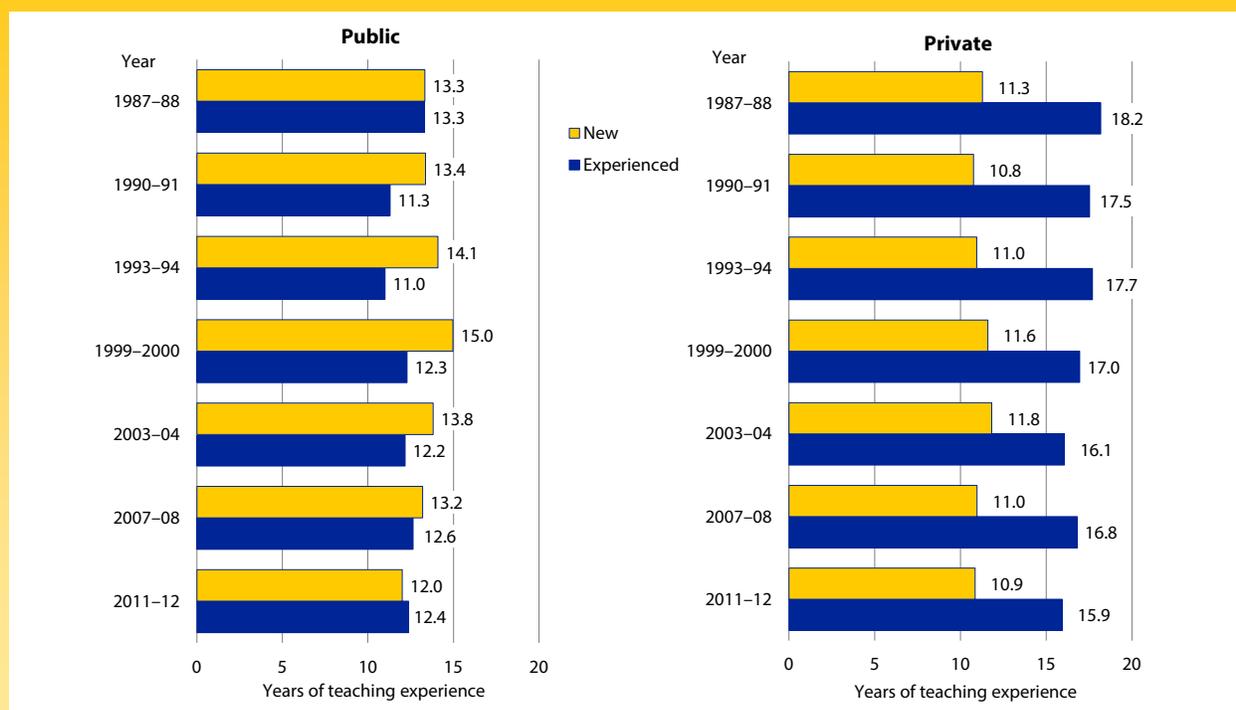
of experienced principals. In 1987–88, the difference was larger: 43 percent of new principals and 20 percent of experienced principals held a bachelor’s degree or less.

In 2011–12, 41 percent of new private school principals and 53 percent of experienced principals held a master’s as their highest degree. Fewer new principals held a degree beyond the master’s degree in 2011–12 than their more experienced colleagues (15 vs. 21 percent, respectively).

In the public sector, the average years of teaching experience for new principals was not significantly different from that of experienced principals in either 2011–12 or 1987–88 (figure 13). However, in private schools, experienced principals had more teaching background in 2011–12: 15.9 years compared to 10.9 years of teaching experience among new principals. There was no significant difference in the years of teaching experience of new and experienced private school principals in 2011–12 when compared to new and experienced principals in 1987–88.⁵

FIGURE 13.

Average years of teaching experience for new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12



NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Teaching experience includes the total number of years teaching, including before and since becoming a principal.

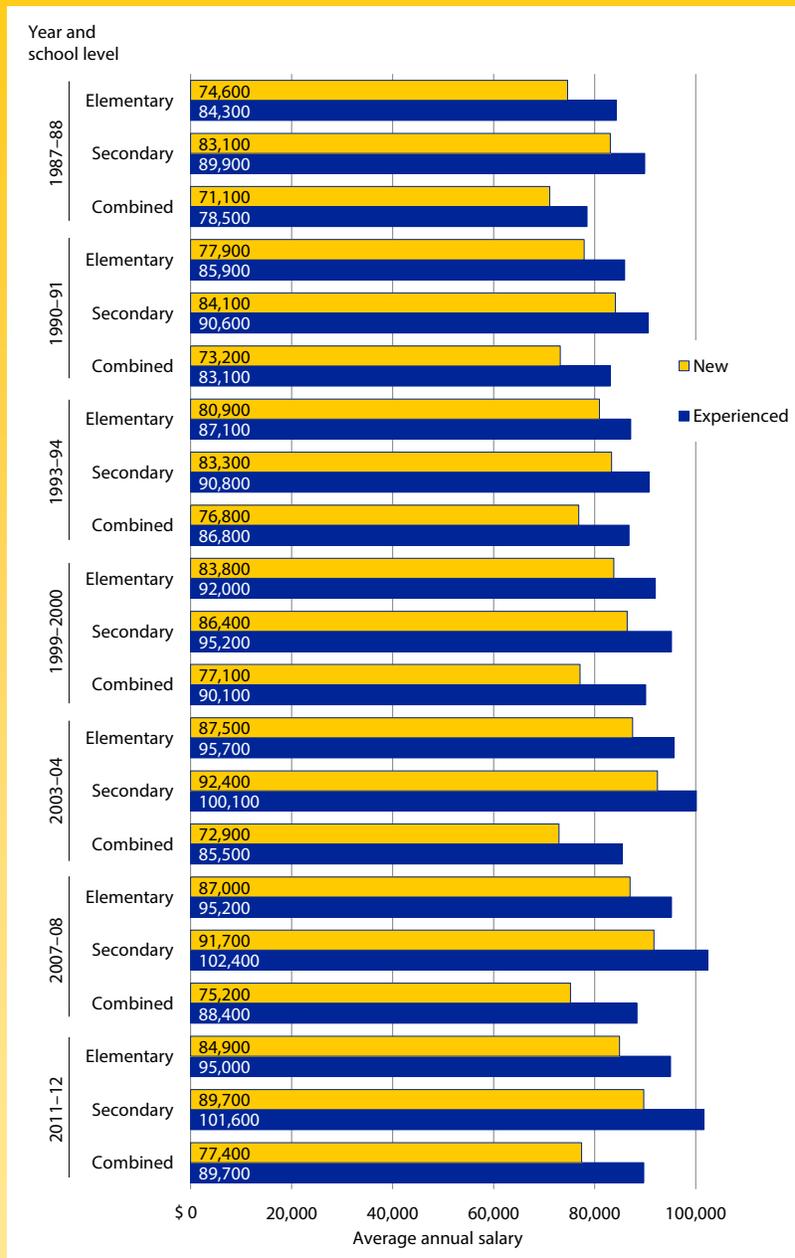
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

⁵ Additional analysis suggests that the difference between the years of experience for new and experienced private school principals decreased over the 18 years between the 1993–94 and 2011–2012 school years.

Average annual salary in 2011–12 was higher for more experienced principals than new principals at all school levels (figure 14). In 2011–12, the average salary was \$84,900 for new principals and \$95,000 for experienced principals at public elementary schools. At public secondary schools, the average salary for new principals was \$89,700 and \$101,600 for experienced principals. For new principals at public combined schools, the average salary was \$77,400 and \$89,700 for experienced principals. The difference between new and experienced principal salaries was higher in 2011–12 than in 1987–88 for secondary school principals.

FIGURE 14.

Average annual salary (in 2012 dollars) for new and experienced public school principals, by year and school level: Selected years, 1987–88 through 2011–12

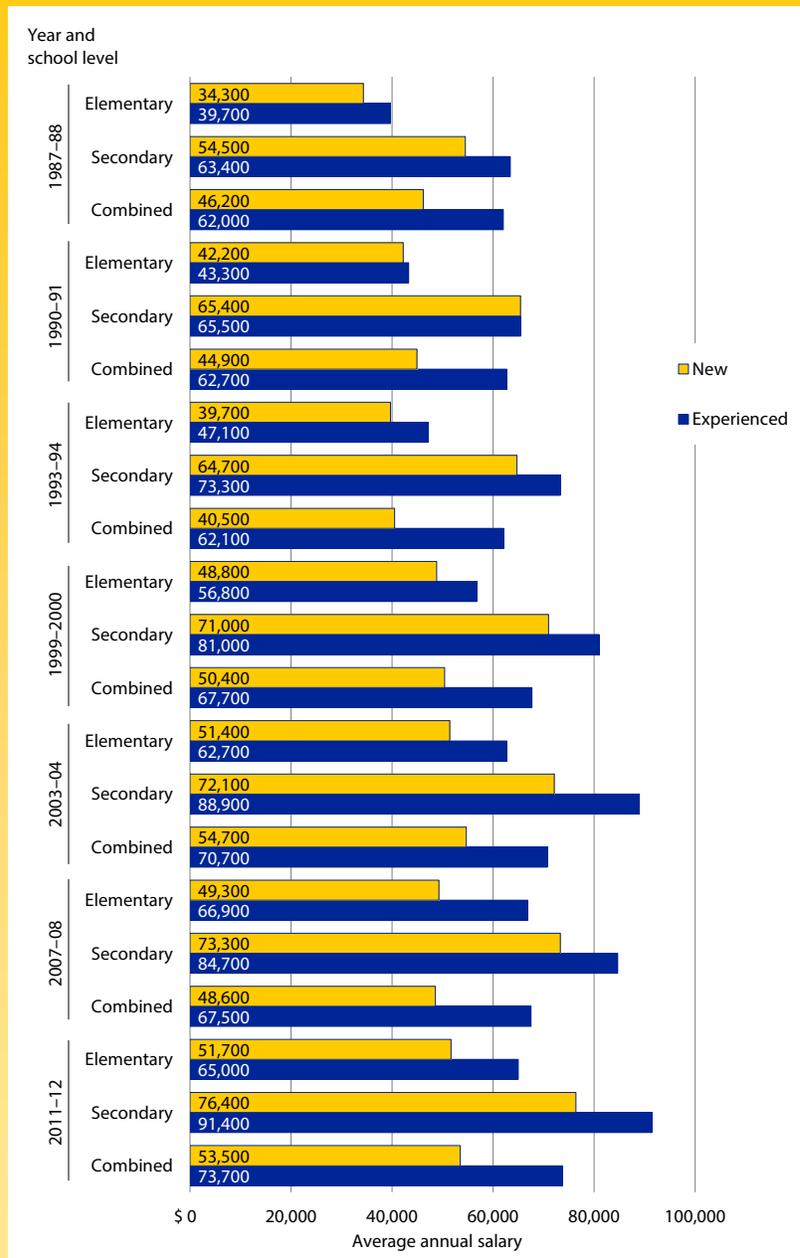


NOTE: New principals are defined as those with three or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Elementary schools are those with any of grades K–6 and none of grades 7–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 1,070 new and 1,340 experienced principals in 1987–88, 660 new and 770 experienced principals in 1990–91, and 1,550 new and 1,800 experienced principals in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U). SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Experienced private school principals in 2011–12 had higher average salaries than new principals at two levels: \$65,000 versus \$51,700 in elementary schools and \$73,700 versus \$53,500 in combined schools (figure 15). The difference between salaries for new and experienced elementary school principals was significantly larger in 2011–12 than it was in 1987–88.

FIGURE 15.

Average annual salary (in 2012 dollars) for new and experienced private school principals, by year and school level: Selected years, 1987–88 through 2011–12



NOTE: New principals are defined as those with three or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Elementary schools are those with any of grades K–6 and none of grades 7–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 470 new and 470 experienced principals in 1987–88, 130 new and 960 experienced principals in 1990–91, and 900 new and 890 experienced principals in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U). SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Principal Questionnaires,” 1987–88 through 2011–12.

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<http://nces.ed.gov/pubinfo.asp?pubid=2016189>

More detailed information on public and private school principals can be found on the NCES website. Readers may be interested in the following NCES products related to the topic of the Statistics in Brief:

Principal Attrition and Mobility: Results From the 2012–13 Principal Follow-up Survey (NCES 2014-064).
<http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2014064>

Characteristics of Public and Private Elementary and Secondary School Principals in the United States: Results From the 2011–12 Schools and Staffing Survey (NCES 2013-313).
<http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2013313>

Principal Attrition and Mobility: Results From the 2008–09 Principal Follow-up Survey (NCES 2010-337).
<http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2010337>

Characteristics of Public, Private, and Bureau of Indian Education Elementary and Secondary School Principals in the United States: Results From the 2007–08 Schools and Staffing Survey (NCES 2009-323).
<http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=2009323>

Public and Private School Principals in the United States: A Statistical Profile, 1987–88 to 1993–94 (NCES 97-455).
<http://nces.ed.gov/pubsearch/pubinfo.asp?pubid=97455>

For a selection of Schools and Staffing Survey data tables, go to <http://nces.ed.gov/surveys/sass/tables.asp>.

TECHNICAL NOTES

Survey Methodology

The estimates provided in this Statistics in Brief are based on data collected through seven administrations of the Schools and Staffing Survey (SASS) during school years 1987–88, 1990–91, 1993–94, 1999–2000, 2003–04, 2007–08, and 2011–12. Information about schools and their staffs was collected from the sampled schools and their associated districts, principals, library media centers, and teachers. The principals’ survey asked questions about demographics, educational background, professional development, and opinions regarding school climate. In addition to the principals’ characteristics presented in this Statistics in Brief, researchers can use the SASS data to investigate questions such as which

school problems administrators view as serious, how administrators perceive their influence on school policy, and which teachers leave the classroom for the administrative field.

SASS was collected by the U.S. Census Bureau on behalf of the National Center for Education Statistics (NCES). Schools were sampled from the Common Core of Data (CCD) and the Private School Universe Survey (PSS), except in 1987–88 (see exhibit 1). The principal of each sampled school received a principals’ survey. The Census Bureau employed a mail-based approach with subsequent telephone and field follow-up for nonresponse. The 1999–2000 SASS used a field-based methodology in which Census Bureau field representatives were responsible for all data collection at sampled schools.

Survey responses were returned to the Census Bureau where staff reviewed returned questionnaires, captured data, and implemented quality control procedures. After editing, cases with “not-answered” values were imputed in a two-stage process that first used responses from other collected information from the same school, and subsequently from similar school principals.

Weights for the sampled units were developed to enable production of national and state estimates. The starting point was the base weight, which was calculated for each principal as the inverse of the school’s probability of selection. These base weights were adjusted for nonresponse and to ensure that sample totals (based on responding, nonresponding, and out-of-scope cases) were comparable to frame totals.

Exhibit 1. Selected statistics on SASS data collections

	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Target population	Principals of public and private schools	Principals of public and private schools	Principals of public and private schools	Principals of public and private schools	Principals of public and private schools	Principals of public and private schools	Principals of public and private schools
Target population size	103,290	102,770	104,630	110,020	115,310	118,430	115,540
SASS sampling frame	1986 QED file; area frame derived from 1983 Private School Survey	1988–89 CCD; 1989–90 PSS	1991–92 CCD; 1991–92 PSS	1997–98 CCD; 1997–98 PSS; and <i>The State of Charter Schools 2000</i>	2001–02 CCD; and 2001–02 PSS	2005–06 CCD; and 2005–06 PSS	2009–10 CCD; and 2009–10 PSS
Sample							
Public	9,320	9,609	9,960	9,890	10,200	9,800	11,000
Private	3,510	3,270	3,360	3,560	3,620	2,940	3,000
Response rates							
Public	94.4	96.7	96.6	90.0	82.2	79.4	72.7
Private	79.3	90.0	87.6	84.8	74.9	72.2	64.7

NOTE: CCD=Common Core of Data; PSS=Private School Universe Survey.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Principal Data File,” 1987–88 through 2011–12; “Private School Principal Data File,” 1987–88 through 2011–12; and “Charter School Principal Data File,” 1999–2000.

Response Rates

Due to the voluntary nature of SASS and the growth of surveys administered in schools, response rates among both public and private school principals have declined between 1990–91 and 2011–12. As shown in exhibit 1, response rates of public school principals ranged from 97 percent in 1990–91 to 73 percent in 2011–12. Response rates of private school principals ranged from 90 percent in 1990–91 to 65 percent in 2011–12. NCES Statistical Standard 4-4-1 states that “[a]ny survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or any analysis using the data may be released” (U.S. Department of Education 2012). For those years in which a bias analysis for unit nonresponse was required and conducted, no evidence of bias was found for domains used in this report. Additionally, no survey items used in this report were missing at rates that require item-level nonresponse bias analyses. For information about response rates and bias analysis results, please see the technical appendix of Bitterman, Goldring, and Gray (2013).

Two broad categories of error occur in estimates generated from surveys: sampling and nonsampling errors.

Sampling errors occur when observations are based on samples rather than on entire populations. The standard error of a sample statistic indicates the precision of the statistic. The complex sampling design must be taken into account when calculating variance estimates such as standard errors. Estimates in this Statistics in Brief were generated in SAS 9.2 using the balanced repeated replication (BRR) method to adjust variance estimation for complex sample designs.

Nonsampling errors can be attributed to several sources: information that is not complete for all respondents (e.g., some principals refused to participate, or participated but answered only certain items); differences among respondents in question interpretation; inability or unwillingness to give correct information; mistakes in recording or coding data; and other errors of collecting, processing, and imputing missing data.

Statistical Procedures

Comparisons of means, medians, and proportions were tested using Student’s *t* statistic. Differences between estimates were tested against the probability of a Type I error⁶ or significance level. The statistical significance of each comparison was determined by calculating the Student’s *t* value for the difference

between each pair of means or proportions and comparing the *t* value with published tables of significance levels for two-tailed hypothesis testing. Student’s *t* values were computed to test differences between independent estimates using the following formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors.

There are some potential hazards in interpreting the results of statistical tests. First, the magnitude of the *t* statistics depends not only on observed differences between means or percentages, but also on the number of respondents. A small difference found in a comparison across a large number of respondents would still produce a large and possibly statistically significant *t* statistic.

A second hazard stems from reliance on a sample, rather than an entire population: one can conclude that a difference found in the sample is real when there is no true difference in the population. Statistical tests are designed to limit the risk of this Type 1, or “false positive,” error by setting a significance level, or alpha. An alpha level of .05 was selected for the findings in this report. It ensures that the probability of

⁶ A Type I error occurs when one concludes that a difference observed in a sample reflects a true difference in the population from which the sample was drawn, when no such difference is present.

finding a false positive result is no more than 1 in 20 (.05) occurrences. However, failing to meet the significance level of .05 does not mean that there is no real difference between two quantities, only that the likelihood is less.

Regression analyses was used to test for trends over time. In general, a regression analysis assesses the degree to which one variable (a dependent variable, e.g., age, race/ethnicity, or salary) is related to one or more other variables (independent variables, e.g., the year data were collected). The estimation procedure most commonly used in regression analysis is ordinary least squares (OLS). Significant and positive slope coefficients suggest that

estimates increased over time. Conversely, significant and negative coefficients suggest that estimates decreased over time. All regression models included one dependent variable (i.e., the estimate being tested) and one independent variable (i.e., the years data were collected). Models did not include any additional control variables.

Constructs and Variables Used in the Analysis

Constructs and variables used in the analysis are described below (exhibit 2).

School Characteristics

Sector. The 1999–2000 SASS conducted a universe survey of all known

charter schools. The three subsequent administrations included a representative sample of charter schools. Bureau of Indian Education (BIE) schools were not included in this analysis because of small sample size.

School level. In 1999–2000 and following years school level was imputed for principals of nonresponding schools. However, in 1987–88, 1990–91, and 1993–94, school level was not imputed and these schools were listed as “missing” in analyses using school level. In tables 1 and 2, principals with a missing school level are identified in the “unknown” row.

Exhibit 2. Constructs and variables used in this report

Construct	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Age	ASC075	ASC125	ASC091	A0231	A0262	A0248	A0330
Annual base salary	ASC060	ASC055	ASC495	A0226	A0263	A0249	A0335
Final weight	ADMWGT	ADMWGT	ADMWGT	AFNLWGT	AFNLWGT	AFNLWGT	AFNLWGT
Highest degree	ASC012, ASC015, ASC021, ASC027, ASC030, ASC033	ASC012, ASC017, ASC020, ASC021, ASC024, ASC027	ASC060, ASC125, ASC155, ASC165, ASC175, ASC190	A0225	A0039	A0032	A0058
Race/ethnicity	ASC073, ASC074	ASC122, ASC124	ASC895, ASC905	A0228, A0229	A0255, A0256, A0257, A0258, A0259, A0260	A0241, A0242, A0243, A0244, A0245, A0246	A0321, A0322, A0323, A0324, A0325, A0326
Replicate weights	REPWGT1-REPWGT48	REPWGT1-REPWGT48	REPWGT1-REPWGT48	AREPWT1-AREPWT88	AREPWT1-AREPWT88	AREPWT1-AREPWT88	AREPWT1-AREPWT88
School level	SCHLEVEL	SCHLEVEL	SCHLEVEL	SCHLEVEL	SCHLEVEL	SCHLEVEL	SCHLEVEL
Sector	SECTOR	SECTOR	SECTOR	SECTOR	SECTOR	SECTOR	SECTOR
Sex	ASC072	ASC121	ASC0890	A0227	A0254	A0240	A0320
Years of experience as a principal	PRNEXPER	PRNEXPER	PRNEXPER	A0053, A0054	A0025	A0025	A0025
Years of teaching experience	TCHEXPER	TCHEXPER	TCHEXPER	TCHEXPER	TCHEXPER	TCHEXPER	TCHEXPER

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Principal Data File,” 1987–88 through 2011–12; “Private School Principal Data File,” 1987–88 through 2011–12; and “Charter School Principal Data File,” 1999–2000.

Principal Characteristics

Annual base salary in constant 2012 dollars. The principals' reported salaries were adjusted for inflation using the Consumer Price Index for urban households (CPI-U), which was calculated as the average of monthly CPI-U between September of the first year and August of the second year. Principals who reported zero were excluded from analyses using salary.⁷ Less than 1 percent of public school principals were excluded in 1987–88 and 1999–2000; none were excluded after then. Among private school principals, 6 percent were excluded in 1987–88 and 1990–91, 4 percent in 1993–94, 1 percent in 1999–2000, 3 percent in 2003–04, 2 percent in 2007–08, and 7 percent in 2011–12.

Highest degree. Derived from the principal's response, the following categories were created for this analysis: bachelor's degree or less; master's degree; or higher than a master's degree. A degree higher

than a master's degree includes an education specialist diploma, first-professional degree, or PhD.

Principal's age. Based on the respondent's reported year of birth, age was calculated by subtracting the principal's reported year of birth from the fall of the associated school year (e.g., 2011 in school year 2011–12).

Principal experience. The total number of years of working as a school principal. New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal.

Race/ethnicity. A variable created for this analysis based on whether the principal is of Hispanic or Latino origin and the principal's race. The principals' questionnaire has consistently administered the Hispanic ethnicity item since 1987–88, but the race categories have changed. The

1987–88 questionnaire included four race categories: (1) American Indian, Aleut, Eskimo; (2) Asian or Pacific Islander; (3) Black; and (4) White. On the 1990–91, 1993–94, and 1999–2000 questionnaires, the first option was changed to American Indian or Alaska Native. Since 2003–04, the questionnaires have separated Asian or Pacific Islander into two responses: (1) Asian and (2) Native Hawaiian or Other Pacific Islander. In order to provide longitudinal comparisons, the following categories were created for analysis: Hispanic, regardless of race; White, non-Hispanic; Black or African-American, non-Hispanic; and Other, non-Hispanic. Created due to small cell sizes, Other, non-Hispanic includes American Indian/Alaska Native, non-Hispanic; Native Hawaiian or Other Pacific Islander, non-Hispanic; or Two or more races, non-Hispanic.

Teaching experience. The total number of years of teaching, including before and since becoming a principal.

⁷ While early SASS principal questionnaires (1987–88 through 1999–2000) provided a response option to specify an unpaid position, more recent questionnaires (beginning in 2003–04) did not provide this response option. For consistency across all survey years in this report, principals reporting a zero were counted as missing.

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APPENDIX A: DATA TABLES

Table A-1. Percentage distribution of school principals, by sector and sex: Selected years, 1987–88 through 2011–12

Sector and sex	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Male	75.4	70.0	65.5	56.2	52.4	49.7	48.4
Female	24.6	30.0	34.5	43.8	47.6	50.3	51.6
Private							
Male	47.8	48.7	46.4	45.4	43.7	46.7	44.6
Female	52.2	51.3	53.6	54.6	56.3	53.3	55.4

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-2. Percentage distribution of school principals, by sector and race/ethnicity: Selected years, 1987–88 through 2011–12

Sector and race/ethnicity	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Hispanic	3.3	3.9	4.1	5.2	5.3	6.5	6.8
White	86.6	85.9	84.3	82.3	82.4	80.9	80.3
Black	8.5	8.6	10.1	11.0	10.6	10.6	10.1
Other	1.6	1.6	1.6	1.5	1.7	2.0	2.8
Private							
Hispanic	2.5	2.5	2.1	3.2	3.0	4.0	3.3
White	93.0	93.7	92.5	88.9	89.8	87.3	87.3
Black	3.1	2.7	4.2	6.0	5.2	6.5	6.8
Other	1.4	1.1	1.2	1.9	2.1	2.3	2.5

NOTE: Black includes African American and Hispanic includes Latino. Other includes American Indian/Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; or Two or more races. Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-3. Average age of school principals, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	46.8	47.2	47.7	49.3	49.3	48.8	48.0
Private	45.4	46.4	47.1	49.9	50.5	51.0	51.7

NOTE: Age was calculated by subtracting the principal's reported year of birth from the fall of the associated school year, e.g., 2011 in school year 2011–12.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-4. Percentage distribution of school principals, by sector and highest degree: Selected years, 1987–88 through 2011–12

Sector and highest degree	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Bachelor's degree or less	2.5	1.8	1.4	1.8	1.9	1.5	2.2
Master's degree	53.4	60.5	63.4	54.2	59.2	61.1	61.7
Higher than a master's degree	44.1	37.6	35.2	43.9	38.9	37.5	36.1
Private							
Bachelor's degree or less	30.4	34.3	34.3	30.7	33.1	32.6	31.0
Master's degree	51.0	47.4	51.6	51.0	49.5	50.2	49.7
Higher than a master's degree	18.6	18.3	14.1	18.4	17.3	17.2	19.2

NOTE: Degrees higher than a master's degree include the education specialist or professional diploma degree and Doctorate or first professional degree. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-5. Average total years of experience as a school principal, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	10.0	9.3	8.7	9.0	7.8	7.5	7.2
Private	8.0	8.7	8.8	10.2	10.0	10.0	10.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-6. Average years of teaching experience of school principals, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	13.3	12.3	12.6	14.0	13.5	13.1	12.2
Private	14.4	14.3	14.3	14.5	14.1	13.9	13.9

NOTE: Teaching experience includes the total number of years teaching, including before and since becoming a principal.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-7. Average annual salary (in 2012 dollars) for public school principals, by school level: Selected years, 1987–88 through 2011–12

School level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Elementary	\$80,600	\$82,600	\$84,100	\$88,400	\$92,000		\$89,600
Secondary	87,700	88,000	87,900	91,900	96,900	96,400	96,300
Combined	76,500	78,600	82,000	84,300	78,900	80,900	82,900

NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information is missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 3,300 in 1987–88, 2,110 in 1990–91, and 4,930 in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-8. Average annual salary (in 2012 dollars) for private school principals, by school level: Selected years, 1987–88 through 2011–12

School level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Elementary	\$38,300	\$42,500	\$44,700	\$53,500	\$57,700	\$59,200	\$60,400
Secondary	58,100	64,500	67,800	77,000	79,300	80,200	84,900
Combined	51,500	53,800	52,200	60,100	62,900	58,800	66,900

NOTE: Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse, some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 1,360 in 1987–88, 2,120 in 1990–91, and 2,590 in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-9. Percentage distribution of new and experienced school principals, by sector, year and sex: Selected years, 1987–88 through 2011–12

Year and experience level	Public		Private	
	Male	Female	Male	Female
1987–88				
New	59.4	40.6	46.3	53.7
Experienced	87.7	12.3	48.1	51.9
Difference between new and experienced	-28.2	28.2	‡	‡
1990–91				
New	55.0	45.0	48.8	51.2
Experienced	85.1	14.9	51.8	48.2
Difference between new and experienced	-30.0	30.0	‡	‡
1993–94				
New	52.5	47.5	43.9	56.1
Experienced	82.2	17.8	48.6	51.4
Difference between new and experienced	-29.8	29.8	‡	‡
1999–2000				
New	46.1	53.9	40.3	59.7
Experienced	68.0	32.0	50.1	49.9
Difference between new and experienced	-21.9	21.9	-9.8	9.8
2003–04				
New	46.0	54.0	41.4	58.6
Experienced	63.1	36.9	48.5	51.5
Difference between new and experienced	-17.1	17.1	-7.1 !	7.1 !
2007–08				
New	45.7	54.3	45.0	55.0
Experienced	54.9	45.1	49.0	51.0
Difference between new and experienced	-9.2 !	9.2 !	‡	‡
2011–12				
New	46.0	54.0	42.7	57.3
Experienced	52.9	47.1	46.8	53.2
Difference between new and experienced	-6.9 !	6.9 !	‡	‡

! Interpret data with caution.

‡ Reporting standards not met.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal.

Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-10. Percentage distribution of new and experienced school principals, by sector, year and race/ethnicity: Selected years, 1987–88 through 2011–12

Year and experience level	Public				Private			
	Hispanic	White	Black	Other	Hispanic	White	Black	Other
1987–88								
New	5.0	84.4	8.9	1.6	2.4 !	93.4	2.9	1.4 !
Experienced	1.9	88.7	8.0	1.4	2.6 !	93.4	2.2	1.8
Difference between new and experienced	3.1	-4.2	‡	‡	‡	‡	‡	‡
1990–91								
New	4.5	83.8	9.9	1.8	2.0	94.8	3.1	‡
Experienced	2.5	88.8	7.6	1.1	1.9	94.0	2.3 !	1.8 !
Difference between new and experienced	2.0 !	-5.1	2.3 !	‡	‡	‡	‡	-1.6 !
1993–94								
New	5.1	81.8	11.5	1.7	1.6 !	93.1	4.0	1.3
Experienced	2.6	88.7	7.6	1.1	2.3	92.5	3.5	1.6 !
Difference between new and experienced	2.5	-6.9	3.8	‡	‡	‡	‡	‡
1999–2000								
New	5.6	79.5	12.8	2.0	5.0	85.9	8.6	0.5 !
Experienced	4.9	84.2	9.7	1.2	2.5	90.5	4.7	2.3
Difference between new and experienced	‡	-4.7 !	3.1 !	‡	‡	-4.6 !	3.9 !	-1.8
2003–04								
New	6.6	79.9	11.4	2.1	4.9	85.7	7.5	1.9 !
Experienced	4.3	85.5	8.8	1.4	1.9	92.8	3.2	2.1
Difference between new and experienced	2.3 !	-5.6	2.6 !	‡	3.0 !	-7.1	4.3 !	‡
2007–08								
New	7.3	77.7	12.5	2.5	4.1	82.6	9.0	4.3
Experienced	5.4	84.6	8.4	1.6	3.5	91.0	4.2	1.3 !
Difference between new and experienced	‡	-6.9 !	4.1 !	‡	‡	-8.3	4.8 !	3.0 !
2011–12								
New	8.5	77.5	11.1	2.9	3.3	87.0	7.4	2.3 !
Experienced	5.4	83.7	7.6	3.3	3.6	87.0	7.1	2.4 !
Difference between new and experienced	3.1	-6.2	3.5	-0.4	-0.2	#	0.3	-0.1

Rounds to zero.

! Interpret data with caution.

‡ Reporting standards not met.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Black includes African American and Hispanic includes Latino. Other includes American Indian/Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; or Two or more races. Race categories exclude Hispanic origin unless specified. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-11. Average age of new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12

Year and experience level	Public	Private
1987–88		
New	42.1	41.5
Experienced	50.8	51.5
Difference between new and experienced	-8.7	-10.0
1990–91		
New	43.0	41.3
Experienced	51.3	51.7
Difference between new and experienced	-8.3	-10.4
1993–94		
New	44.4	41.9
Experienced	51.4	52.5
Difference between new and experienced	-7.0	-10.6
1999–2000		
New	45.7	44.1
Experienced	52.5	54.4
Difference between new and experienced	-6.8	-10.3
2003–04		
New	44.7	44.7
Experienced	54.2	55.9
Difference between new and experienced	-9.5	-11.3
2007–08		
New	44.0	44.3
Experienced	55.0	57.6
Difference between new and experienced	-11.0	-13.3
2011–12		
New	43.0	43.8
Experienced	54.6	57.9
Difference between new and experienced	-11.6	-14.1

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Age was calculated by subtracting the principal's reported year of birth from the fall of the associated school year, e.g., 2011 in school year 2011–12.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-12. Percentage distribution of new and experienced school principals, by sector, year, and highest degree: Selected years, 1987–88 through 2011–12

Year and experience level	Public			Private		
	Bachelor's degree or less	Master's degree	Higher than a Master's degree	Bachelor's degree or less	Master's degree	Higher than a Master's degree
1987–88						
New	4.1	49.3	46.5	42.9	44.8	12.4
Experienced	1.5	57.1	41.3	20.1	55.8	24.1
Difference between new and experienced	2.6	-7.8	5.2	22.8	-11.0	-11.7
1990–91						
New	2.9	59.7	37.4	48.4	37.6	14.0
Experienced	1.4	62.9	35.8	22.5	55.8	21.6
Difference between new and experienced	1.6 !	-3.2 !	†	25.9	-18.2	-7.7
1993–94						
New	2.2	66.4	31.4	45.1	46.4	8.5
Experienced	0.8	62.2	37.1	25.2	57.8	17.0
Difference between new and experienced	1.4	4.2 !	-5.7	19.9	-11.4	-8.5
1999–2000						
New	3.6	56.6	39.8	40.7	45.3	14.0
Experienced	0.9	52.0	47.1	21.3	56.3	22.4
Difference between new and experienced	2.7	4.5 !	-7.2	19.4	-11.0	-8.4
2003–04						
New	3.0	63.1	33.8	42.1	44.5	13.4
Experienced	0.8	55.9	43.3	25.5	53.3	21.2
Difference between new and experienced	2.2	7.3	-9.5	16.7	-8.8	-7.9
2007–08						
New	2.6	67.6	29.8	44.0	41.8	14.2
Experienced	0.6 !	56.5	42.8	24.7	55.5	19.7
Difference between new and experienced	2.0 !	11.1	-13.1	19.3	-13.7	-5.5 !
2011–12						
New	3.6	66.6	29.8	44.3	40.7	15.0
Experienced	1.5	53.4	45.1	25.8	53.4	20.9
Difference between new and experienced	2.1	13.2	-15.3	18.5	-12.7	-5.9

! Interpret data with caution.

† Reporting standards not met.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Degrees higher than a master's degree include the education specialist or professional diploma degree and Doctorate or first professional degree. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-13. Average years of teaching experience for new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12

Year and experience level	Public	Private
1987–88		
New	13.3	11.3
Experienced	13.3	18.2
Difference between new and experienced	‡	-6.9
1990–91		
New	13.4	10.8
Experienced	11.3	17.5
Difference between new and experienced	2.1	-6.8
1993–94		
New	14.1	11.0
Experienced	11.0	17.7
Difference between new and experienced	3.1	-6.7
1999–2000		
New	15.0	11.6
Experienced	12.3	17.0
Difference between new and experienced	2.7	-5.4
2003–04		
New	13.8	11.8
Experienced	12.2	16.1
Difference between new and experienced	1.6	-4.2
2007–08		
New	13.2	11.0
Experienced	12.6	16.8
Difference between new and experienced	‡	-5.8
2011–12		
New	12.0	10.9
Experienced	12.4	15.9
Difference between new and experienced	‡	-5.1

‡ Reporting standards not met.

NOTE: New principals are defined as those with 3 or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Teaching experience includes the total number of years teaching, including before and since becoming a principal.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-14. Average annual salary (in 2012 dollars) for new and experienced public school principals, by year and school level: Selected years, 1987–88 through 2011–12

Year and experience level	Elementary	Secondary	Combined
1987–88			
New	\$74,600	\$83,100	\$71,100
Experienced	84,300	89,900	78,500
Difference between new and experienced	-9,800	-6,900	-7,400
1990–91			
New	77,900	84,100	73,200
Experienced	85,900	90,600	83,100
Difference between new and experienced	-8,000	-6,400	-10,000
1993–94			
New	80,900	83,300	76,800
Experienced	87,100	90,800	86,800
Difference between new and experienced	-6,200	-7,600	-10,000
1999–2000			
New	83,800	86,400	77,100
Experienced	92,000	95,200	90,100
Difference between new and experienced	-8,200	-8,800	-13,000
2003–04			
New	87,500	92,400	72,900
Experienced	95,700	100,100	85,500
Difference between new and experienced	-8,200	-7,700	-12,600
2007–08			
New	87,000	91,700	75,200
Experienced	95,200	102,400	88,400
Difference between new and experienced	-8,200	-10,700	-13,200
2011–12			
New	84,900	89,700	77,400
Experienced	95,000	101,600	89,700
Difference between new and experienced	-10,100	-12,000	-12,300

NOTE: New principals are defined as those with three or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 1,070 new and 1,340 experienced principals in 1987–88, 660 new and 770 experienced principals in 1990–91, and 1,550 new and 1,800 experienced principals in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table A-15. Average annual salary (in 2012 dollars) for new and experienced private school principals, by year and school level: Selected years, 1987–88 through 2011–12

Year and experience level	Elementary	Secondary	Combined
1987–88			
New	\$34,300	\$54,500	\$46,200
Experienced	39,700	63,400	62,000
Difference between new and experienced	-5,400 !	‡	-15,800
1990–91			
New	42,200	65,400	44,900
Experienced	43,300	65,500	62,700
Difference between new and experienced	‡	‡	-17,800
1993–94			
New	39,700	64,700	40,500
Experienced	47,100	73,300	62,100
Difference between new and experienced	-7,400	-8,600 !	-21,600
1999–2000			
New	48,800	71,000	50,400
Experienced	56,800	81,000	67,700
Difference between new and experienced	-8,000	-10,000 !	-17,300
2003–04			
New	51,400	72,100	54,700
Experienced	62,700	88,900	70,700
Difference between new and experienced	-11,300	-16,800 !	-16,000
2007–08			
New	49,300	73,300	48,600
Experienced	66,900	84,700	67,500
Difference between new and experienced	-17,600	‡	-18,900
2011–12			
New	51,700	76,400	53,500
Experienced	65,000	91,400	73,700
Difference between new and experienced	-13,300	‡	-20,300

! Interpret data with caution.

‡ Reporting standards not met.

NOTE: New principals are defined as those with three or fewer years of experience as a principal. Experienced principals are defined as those with 10 or more years of experience as a principal. Elementary schools are those with any of grades K–6 and none of grades 9–12. Secondary schools have any of grades 7–12 and none of grades K–6. Combined schools are those schools with grade levels in both elementary and secondary grade levels, or with all students in ungraded classrooms. Due to school nonresponse some school level information was missing in 1987–88, 1990–91, and 1993–94, and imputed in 1999–2000 and onward. As a result, the following principals were excluded from the figure: 470 new and 470 experienced principals in 1987–88, 130 new and 960 experienced principals in 1990–91, and 900 new and 890 experienced principals in 1993–94. Principals who reported an annual salary of zero are excluded. Amounts for years prior to 2012 have been adjusted for inflation using the Consumer Price Index for urban households (CPI-U).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

APPENDIX B: STANDARD ERROR TABLES

Table B-1. Standard errors for table 1: Number of school principals, by sector and school level: Selected years, 1987–88 through 2011–12

Sector and school level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
All schools	768.1	440.9	338.0	430.1	698.4	678.6	788.8
All public schools	295.1	216.9	235.2	326.9	306.6	544.4	406.4
Elementary	344.8	250.2	293.5	253.2	360.6	583.9	442.6
Secondary	182.3	183.3	161.2	196.9	272.0	460.2	537.3
Combined	126.2	160.3	142.9	146.4	263.3	363.6	657.8
Unknown	174.9	187.7	212.8	†	†	†	†
All private schools	715.4	390.3	197.7	259.0	676.5	328.0	605.5
Elementary	412.2	274.6	243.7	244.9	327.3	297.2	504.6
Secondary	162.0	114.1	114.9	133.3	364.1	168.4	137.9
Combined	419.5	201.9	173.9	265.4	281.2	271.4	210.4
Unknown	155.8	171.4	158.5	†	†	†	†

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-2. Standard errors for table A-1: Percentage distribution of school principals, by sector and sex: Selected years, 1987–88 through 2011–12

Sector and sex	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Male	0.51	0.69	0.70	0.69	0.79	1.21	0.92
Female	0.51	0.69	0.70	0.69	0.79	1.21	0.92
Private							
Male	1.44	1.16	1.10	1.06	1.43	1.38	1.48
Female	1.44	1.16	1.10	1.06	1.43	1.38	1.48

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-3. Standard errors for table A-2: Percentage distribution of school principals, by sector and race/ethnicity: Selected years, 1987–88 through 2011–12

Sector and race/ethnicity	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Hispanic	0.18	0.34	0.33	0.36	0.40	0.60	0.46
White	0.36	0.50	0.54	0.57	0.52	0.92	0.66
Black	0.30	0.37	0.45	0.39	0.43	0.73	0.43
Other	0.17	0.17	0.17	0.18	0.17	0.33	0.29
Private							
Hispanic	0.65	0.30	0.37	0.52	0.41	0.52	0.56
White	0.89	0.65	0.70	0.76	0.88	0.91	1.08
Black	0.54	0.52	0.50	0.62	0.57	0.67	0.75
Other	0.33	0.26	0.25	0.29	0.41	0.41	0.50

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-4. Standard errors for table A-3: Average age of school principals, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	0.08	0.11	0.09	0.08	0.13	0.18	0.13
Private	0.22	0.24	0.25	0.20	0.25	0.32	0.41

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-5. Standard errors for table A-4: Percentage distribution of school principals, by sector and highest degree: Selected years, 1987–88 through 2011–12

Sector and highest degree	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public							
Bachelor's degree or less		0.26	0.23	0.21	0.22	0.24	0.23
Master's degree		0.51	0.70	0.65	0.63	0.71	1.01
Higher than a master's degree		0.52	0.68	0.65	0.61	0.70	1.04
Private							
Bachelor's degree or less		1.75	1.10	1.23	1.16	1.27	1.37
Master's degree		1.56	1.13	1.28	1.09	1.20	1.20
Higher than a master's degree		1.04	0.93	0.59	0.87	0.76	0.97

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-6. Standard errors for table A-5: Average total years of experience as a school principal, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	0.09	0.14	0.10	0.11	0.10	0.14	0.09
Private	0.18	0.18	0.20	0.20	0.24	0.22	0.31

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-7. Standard errors for table A-6: Average years of teaching experience of school principals, by sector: Selected years, 1987–88 through 2011–12

Sector	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Public	0.09	0.11	0.09	0.10	0.11	0.14	0.12
Private	0.31	0.22	0.29	0.22	0.25	0.29	0.38

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-8. Standard errors for table A-7: Average annual salary (in 2012 dollars) for public school principals, by school level: Selected years, 1987–88 through 2011–12

School level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Elementary	\$292.45	\$249.26	\$261.64	\$261.21	\$274.10	\$522.62	\$302.46
Secondary	272.22	311.61	259.52	332.21	538.87	750.71	610.73
Combined	646.41	650.96	792.94	741.10	751.07	1,322.54	1,341.75

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-9. Standard errors for table A-8: Average annual salary (in 2012 dollars) for private school principals, by school level: Selected years, 1987–88 through 2011–12

School level	1987–88	1990–91	1993–94	1999–2000	2003–04	2007–08	2011–12
Elementary	\$662.03	\$604.36	\$690.06	\$802.48	\$821.37	\$1,035.83	\$1,160.76
Secondary	2,259.97	2,766.58	1,217.80	1,837.91	3,163.94	2,533.41	6,936.71
Combined	1,776.90	1,397.13	1,724.41	1,230.68	1,850.15	1,578.78	2,294.32

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-10. Standard errors for table 2: Percentage distribution of new and experienced school principals, by sector, year and experience level: Selected years, 1987–88 through 2011–12

Year and experience level	Public				Private			
	Elementary	Secondary	Combined	Unknown	Elementary	Secondary	Combined	Unknown
1987–88								
New principals	1.11	0.79	0.38	0.58	2.28	1.32	2.64	1.03
Experienced principals	0.71	0.62	0.26	0.31	1.47	0.94	1.31	1.11
Difference between new and experienced	1.32	†	0.46	0.66	2.72	†	2.94	1.52
1990–91								
New principals	1.02	0.86	0.46	0.56	2.21	0.87	1.82	1.26
Experienced principals	0.74	0.60	0.37	0.32	1.84	0.74	1.75	1.38
Difference between new and experienced	1.26	1.04	0.59	†	2.88	†	2.52	1.87
1993–94								
New principals	0.77	0.69	0.34	0.51	2.01	1.23	1.71	1.44
Experienced principals	0.75	0.67	0.20	0.62	1.54	0.48	1.45	0.85
Difference between new and experienced	1.08	†	0.40	†	2.54	1.32	†	†
1999–2000								
New principals	0.79	0.71	0.35	†	1.92	0.76	1.80	†
Experienced principals	0.63	0.55	0.30	†	1.31	0.75	1.20	†
Difference between new and experienced	1.01	0.90	0.46	†	†	1.07	†	†
2003–04								
New principals	1.14	0.99	0.60	†	2.01	1.49	1.68	†
Experienced principals	1.09	1.05	0.59	†	1.55	1.45	1.59	†
Difference between new and experienced	1.58	†	0.84	†	†	†	2.31	†
2007–08								
New principals	1.44	1.27	0.91	†	2.52	1.08	2.58	†
Experienced principals	1.27	1.17	0.60	†	1.71	1.05	1.74	†
Difference between new and experienced	1.92	†	†	†	†	1.51	3.11	†
2011–12								
New principals	1.14	1.03	1.18	†	2.58	1.88	2.34	†
Experienced principals	1.13	0.85	0.79	†	1.72	1.27	1.54	†
Difference between new and experienced	1.61	†	†	†	3.10	2.27	2.80	†

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-11. Standard errors for table A-9: Percentage distribution of new and experienced school principals, by sector and sex: Selected years, 1987–88 through 2011–12

Year and experience level	Public		Private	
	Male	Female	Male	Female
1987–88				
New	1.36	1.36	2.55	2.55
Experienced	0.53	0.53	1.55	1.55
Difference between new and experienced	1.46	1.46	†	†
1990–91				
New	1.37	1.37	2.41	2.41
Experienced	0.86	0.86	1.88	1.88
Difference between new and experienced	1.62	1.62	†	†
1993–94				
New	1.32	1.32	2.52	2.52
Experienced	0.97	0.97	1.67	1.67
Difference between new and experienced	1.64	1.64	†	†
1999–2000				
New	1.16	1.16	2.08	2.08
Experienced	0.91	0.91	1.40	1.40
Difference between new and experienced	1.47	1.47	2.51	2.51
2003–04				
New	1.42	1.42	2.44	2.44
Experienced	1.35	1.35	1.68	1.68
Difference between new and experienced	1.96	1.96	2.96	2.96
2007–08				
New	1.82	1.82	2.44	2.44
Experienced	2.27	2.27	1.66	1.66
Difference between new and experienced	2.91	2.91	†	†
2011–12				
New	1.48	1.48	3.38	3.38
Experienced	1.64	1.64	2.16	2.16
Difference between new and experienced	2.21	2.21	†	†

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-12. Standard errors for table A-10: Percentage distribution of new and experienced school principals, by sector, year and race/ethnicity: Selected years, 1987–88 through 2011–12

Year and experience level	Public				Private			
	Hispanic	White	Black	Other	Hispanic	White	Black	Other
1987–88								
New	0.56	0.80	0.59	0.27	0.79	1.22	0.70	0.60
Experienced	0.22	0.48	0.39	0.22	0.87	1.19	0.66	0.51
Difference between new and experienced	0.61	0.93	†	†	†	†	†	†
1990–91								
New	0.65	1.10	0.79	0.36	0.56	1.00	0.83	†
Experienced	0.36	0.71	0.51	0.27	0.55	1.12	0.69	0.56
Difference between new and experienced	0.74	1.31	0.94	†	†	†	†	0.57
1993–94								
New	0.55	1.04	0.82	0.37	0.60	1.09	0.79	0.32
Experienced	0.43	0.69	0.52	0.19	0.61	1.33	0.88	0.54
Difference between new and experienced	0.70	1.25	0.98	†	†	†	†	†
1999–2000								
New	0.71	1.05	0.80	0.38	1.07	1.75	1.57	0.25
Experienced	0.66	0.98	0.62	0.17	0.70	1.04	0.85	0.42
Difference between new and experienced	†	1.44	1.02	†	†	2.03	1.79	0.49
2003–04								
New	0.88	1.11	0.71	0.36	1.00	1.84	1.28	0.78
Experienced	0.66	0.94	0.85	0.18	0.55	1.00	0.68	0.55
Difference between new and experienced	1.10	1.46	1.11	†	1.14	2.09	1.44	†
2007–08								
New	1.01	1.80	1.39	0.71	0.75	1.62	1.15	1.00
Experienced	1.10	1.51	1.15	0.36	0.73	1.39	1.03	0.46
Difference between new and experienced	†	2.35	1.80	†	†	2.13	1.54	1.10
2011–12								
New	0.93	1.23	0.75	0.49	0.91	1.77	1.31	0.83
Experienced	0.82	1.14	0.89	0.60	0.81	1.67	1.17	0.75
Difference between new and experienced	1.23	1.68	1.16	0.77	1.22	†	1.76	1.12

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-13. Standard errors for table A-11: Average age of new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12

Year and experience level	Public	Private
1987–88		
New	0.16	0.45
Experienced	0.13	0.36
Difference between new and experienced	0.21	0.58
1990–91		
New	0.16	0.46
Experienced	0.14	0.38
Difference between new and experienced	0.22	0.59
1993–94		
New	0.15	0.49
Experienced	0.10	0.25
Difference between new and experienced	0.18	0.55
1999–2000		
New	0.15	0.45
Experienced	0.13	0.23
Difference between new and experienced	0.20	0.51
2003–04		
New	0.23	0.41
Experienced	0.17	0.24
Difference between new and experienced	0.28	0.48
2007–08		
New	0.35	0.56
Experienced	0.22	0.34
Difference between new and experienced	0.41	0.66
2011–12		
New	0.22	0.71
Experienced	0.24	0.43
Difference between new and experienced	0.33	0.83

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-14. Standard errors for table A-12: Percentage distribution of new and experienced school principals, by sector, year, and highest degree: Selected years, 1987–88 through 2011–12

Year and experience level	Public			Private		
	Bachelor's degree or less	Master's degree	Higher than a Master's degree	Bachelor's degree or less	Master's degree	Higher than a Master's degree
1987–88						
New	0.49	0.99	0.96	2.66	2.12	1.36
Experienced	0.26	0.86	0.85	2.20	2.34	1.91
Difference between new and experienced	0.55	1.31	1.28	3.45	3.16	2.34
1990–91						
New	0.61	1.08	1.05	2.51	2.12	1.58
Experienced	0.23	1.09	1.08	1.88	1.95	1.66
Difference between new and experienced	0.65	1.53	†	3.13	2.88	2.29
1993–94						
New	0.39	1.08	1.08	2.65	2.55	0.88
Experienced	0.18	1.24	1.27	2.00	1.88	1.18
Difference between new and experienced	0.43	1.64	1.66	3.32	3.17	1.47
1999–2000						
New	0.55	1.20	1.11	2.29	2.19	1.54
Experienced	0.22	1.06	1.09	1.48	1.58	1.41
Difference between new and experienced	0.59	1.60	1.56	2.72	2.70	2.09
2003–04						
New	0.61	1.29	1.22	2.14	2.01	1.40
Experienced	0.19	1.44	1.43	1.75	1.69	1.28
Difference between new and experienced	0.64	1.93	1.88	2.76	2.62	1.90
2007–08						
New	0.54	1.46	1.51	2.57	2.24	2.00
Experienced	0.31	1.80	1.78	2.00	1.98	1.26
Difference between new and experienced	0.62	2.32	2.33	3.25	2.99	2.36
2011–12						
New	0.70	1.36	1.24	3.57	2.82	2.24
Experienced	0.44	1.45	1.41	2.19	2.18	1.68
Difference between new and experienced	0.83	1.99	1.88	4.19	3.57	2.80

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-15. Standard errors for table A-13: Average years of teaching experience for new and experienced school principals, by sector and year: Selected years, 1987–88 through 2011–12

Year and experience level	Public	Private
1987–88		
New	0.14	0.46
Experienced	0.14	0.52
Difference between new and experienced	†	0.70
1990–91		
New	0.21	0.39
Experienced	0.18	0.40
Difference between new and experienced	0.27	0.56
1993–94		
New	0.14	0.34
Experienced	0.17	0.53
Difference between new and experienced	0.22	0.63
1999–2000		
New	0.21	0.37
Experienced	0.17	0.27
Difference between new and experienced	0.27	0.45
2003–04		
New	0.21	0.45
Experienced	0.16	0.36
Difference between new and experienced	0.27	0.58
2007–08		
New	0.23	0.57
Experienced	0.27	0.43
Difference between new and experienced	†	0.72
2011–12		
New	0.21	0.65
Experienced	0.20	0.51
Difference between new and experienced	†	0.82

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-16. Standard errors for table A-14: Average annual salary (in 2012 dollars) for new and experienced public school principals, by year and school level: Selected years, 1987–88 through 2011–12

Year and experience level	Elementary	Secondary	Combined
1987–88			
New	\$705.60	\$734.99	\$1,318.32
Experienced	420.79	516.89	1,569.57
Difference between new and experienced	821.54	898.55	2,049.76
1990–91			
New	547.83	675.93	1,387.07
Experienced	476.31	754.91	1,324.20
Difference between new and experienced	725.94	1,013.30	1,917.68
1993–94			
New	625.03	509.12	1,300.78
Experienced	602.70	541.46	1,056.24
Difference between new and experienced	868.28	743.22	1,675.61
1999–2000			
New	599.80	550.31	741.66
Experienced	488.14	627.01	1,478.80
Difference between new and experienced	773.33	834.25	1,654.36
2003–04			
New	599.67	1,004.53	1,191.95
Experienced	656.64	915.36	1,834.07
Difference between new and experienced	889.26	1,359.03	2,187.36
2007–08			
New	980.56	1,265.23	1,741.91
Experienced	1,192.75	1,678.87	2,435.14
Difference between new and experienced	1,544.07	2,102.24	2,994.02
2011–12			
New	602.62	1,002.05	2,657.11
Experienced	978.55	1,069.49	1,743.83
Difference between new and experienced	1,149.22	1,465.58	3,178.24

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

Table B-17. Standard errors for table A-15: Average annual salary (in 2012 dollars) for new and experienced private school principals, by year and school level: Selected years, 1987–88 through 2011–12

Year and experience level	Elementary	Secondary	Combined
1987–88			
New	\$1,146.97	\$4,349.95	\$2,203.52
Experienced	1,232.37	4,259.09	2,617.63
Difference between new and experienced	1,683.53	†	3,421.62
1990–91			
New	1,206.80	2,809.98	2,091.97
Experienced	780.49	3,248.55	3,098.64
Difference between new and experienced	†	†	3,738.71
1993–94			
New	1,230.69	2,432.32	2,702.58
Experienced	1,006.98	2,834.71	1,837.79
Difference between new and experienced	1,590.16	3,735.21	3,268.25
1999–2000			
New	1,070.65	2,999.15	2,021.61
Experienced	1,521.88	3,124.59	2,291.85
Difference between new and experienced	1,860.75	4,331.05	3,056.06
2003–04			
New	1,295.58	4,593.64	3,014.64
Experienced	1,321.42	5,322.30	3,097.75
Difference between new and experienced	1,850.59	7,030.53	4,322.51
2007–08			
New	1,726.83	4,017.00	2,774.23
Experienced	1,713.14	5,188.97	3,328.03
Difference between new and experienced	2,432.44	†	4,332.69
2011–12			
New	2,133.00	22,014.93	4,500.02
Experienced	1,900.08	8,837.36	3,466.38
Difference between new and experienced	2,856.57	†	5,680.32

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Principal Questionnaires," 1987–88 through 2011–12.

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