



# 2018 Schools SURVEY



## Survey Methodology, Respondent Demographics, and Glossary

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## Executive Summary

In Spring 2018, the American Speech-Language-Hearing Association (ASHA) conducted a survey of speech-language pathologists (SLPs) and educational audiologists in school settings. The survey was designed to provide information about school-based service delivery and to update and expand information gathered during previous Schools Surveys.

The results are presented in a series of reports. This report is based on responses from SLPs and audiologists in special day/residential schools, preschools, elementary schools, secondary schools, students' homes, administrative offices, and combined school settings. Data are only presented for subsets of data in which at least 25 individuals provided a response. Several groups are included as part of the *total* response, even though data are not presented for them in a separate category because fewer than 25 of them provided the necessary information.

### *Overall Findings*

- ◆ The overall response rate was 48%: 49% for SLPs and 41% for audiologists.
- ◆ 87% of SLPs and 91% of audiologists were salaried employees; the rest were contract employees.
- ◆ The most common facility was elementary schools for SLPs and combined settings for audiologists.
- ◆ 89% of SLPs and 73% of audiologists were clinical service providers.
- ◆ 82% of SLPs and 88% of audiologists worked full time.
- ◆ 87% of SLPs and 90% of audiologists received an annual salary; the rest were paid an hourly wage.
- ◆ 1% of SLPs held a PhD degree, and 54% of audiologists held an AuD degree.
- ◆ The mean age of SLPs was 44 years; the mean age of audiologists was 51 years.
- ◆ SLPs averaged (median) 15 years of experience in the professions; audiologists averaged 25 years.
- ◆ 46% of SLPs worked in a suburban area; 44% of audiologists worked in an urban area.
- ◆ SLPs (31%) and audiologists (32%) were more likely to work in the South than in other areas of the country.

**Survey Methodology**

The survey was mailed on February 14, 2018, to a random sample of 4,500 ASHA-certified SLPs and 500 ASHA-certified audiologists who were employed in school settings in the United States. Individuals who returned their surveys were removed from second (March 14) and third (April 18) mailings. Each mailing consisted of a personalized cover letter, a numbered survey, and a #10 postage-paid business return envelope inserted into a #11 window envelope with an ASHA return address. The first mailing also included a sheet of stickers as an incentive. Metered postage was at the full, first-class rate. In addition, a be-on-the-lookout email was sent to all sample members on February 13.

**Sample Design**

Of the original 5,000 members of the sample, 60 were ineligible. Five respondents ripped off their ID numbers, but their certification status (i.e., CCC-SLP or CCC-A) was revealed in their response to the certification question in the survey. The number of respondents was 2,374, resulting in a 48% response rate overall (see Table 1).

**Response Rate**

**Table 1: Calculation of Response Rate**

<b>Disposition</b>	<b>Total</b>	<b>CCC-SLP</b>	<b>CCC-A</b>
Original sample size	5,000	4,500	500
Respondent removed ID label	5	4	1
Total gross sample size	5,005	4,504	501
Undeliverable mailing address	9	6	3
Ineligible: retired	9	9	0
Ineligible: other reasons	42	39	3
Net sample size	4,945	4,450	495
Number of respondents	2,374	2,170	204
Response rate	<b>48.0%</b>	<b>48.8%</b>	<b>41.2%</b>

**Experimental Design**

Each survey had 38 questions on 25.5 in. × 11 in. white paper, folded to 8.5 in. × 11 in. and printed in a format of two columns per page on five pages. Arial 11-point font was used. The sixth page contained a thank-you note, information about ASHA Connect 2018 and Special Interest Groups, and contact information should respondents have questions about the survey instrument.

A methodological experiment was designed into the survey to test the effect on response rates of the length of cover letters. Half of the SLPs and half of the audiologists were randomly assigned to the control group and received standard-length versions of the cover letters; the other half received shortened letters (see Appendix A for samples of the first set of letters).

Table 2 shows that there was a 3.3% *increase* in the unit response rate when cover letters were shortened compared with the longer version ( $z = 2.32$ ;  $p = .010$ ).

**Table 2: Response Rate, by Experimental Design**

<b>Disposition</b>	<b>Control: Long Letters</b>	<b>Experimental: Short Letters</b>
Original (gross) sample size	2,500	2,500
Undeliverable mailing address	3	6
Ineligible: retired	0	9
Ineligible: other reasons	17	22
Net sample size	2,480	2,463
Number of respondents*	1,147	1,222
Response rate	<b>46.3%</b>	<b>49.6%</b>

\**Note.* An additional 5 respondents removed their identification numbers making it impossible to determine which group they were assigned to.

**Data Entry**

To ensure the highest quality data reasonably possible, each of the 2,374 completed surveys was checked, and erroneous responses were corrected or deleted by the ASHA staff member with primary responsibility for the survey. The forms were then sent to an outside firm for two-pass (key and verify) data entry. This process was completed by June 8, 2018.

Not only is it typically the case that some individuals who receive a survey do not complete it (unit nonresponse), but it is likewise true that some who return their surveys do not answer every question (item nonresponse) and thus do not qualify for inclusion in portions of a report. They may be excluded from analyses because they did not answer a question at all or because their answer disqualified them (such as stating that they were employed part time when a particular analysis was limited to full-time employees). For example, among the 2,170 SLPs who responded, only 2,094 were included in reporting on their primary employment facility (see Figure 1) because they

- ◆ indicated that they had ASHA certification (i.e., the Certificate of Clinical Competence) in Speech-Language Pathology (CCC-SLP);
- ◆ indicated that they were employed full time or part time; and
- ◆ identified the type of employment facility where they were employed.

## Demo- graphics

### Respondents Versus Population

The closer the match between survey respondents and the population of ASHA school-based constituents from which they were drawn, the more validity there is in generalizing from the sample to the population—that is, the more truth there is in saying that the people who answered the survey questions represent the broader group from which they were selected. Demographic variables that appear in both the membership database and the survey include primary employment facility, primary employment function, highest earned degree, sex, age, and region of the country.

Comparisons between the respondents and the population can be made for several characteristics, such as the *type of school* in which they worked.

- In the population, 45% of SLPs and 5% of audiologists who worked in the schools were employed in *elementary schools*, compared with 57% and 23%, respectively, of the survey respondents.

A second area of comparison is their primary *function*.

- 76% of SLPs and 86% of audiologists in the population were *clinical service providers*, compared with 89% of SLPs and 73% of audiologists among the survey respondents.

Another characteristic to be compared is the *highest earned degree*.

- 1% of SLPs and 32% of audiologists in the population reported having earned a *doctoral degree*, compared with 2% of SLPs and 56% of audiologists among the survey respondents.

A fourth characteristic to be compared is *sex*.

- 3% of SLPs and 6% of audiologists in the population were *male*, compared with 2% of SLPs and 7% of audiologists among the survey respondents.

*Age* is another characteristic that can be compared.

- The median age of SLPs who were employed full- or part time was 43 years in both the population and the survey. The median age for audiologists was 51 years in the population and 52 years in the sample.

The survey sample was stratified by state; that is, states with small numbers of ASHA constituents were oversampled, and those with large numbers were undersampled. Despite the stratification, SLPs and audiologists who responded to the survey almost perfectly mirrored those in the population of professionals who work in the schools on *region of the country* where they were employed.

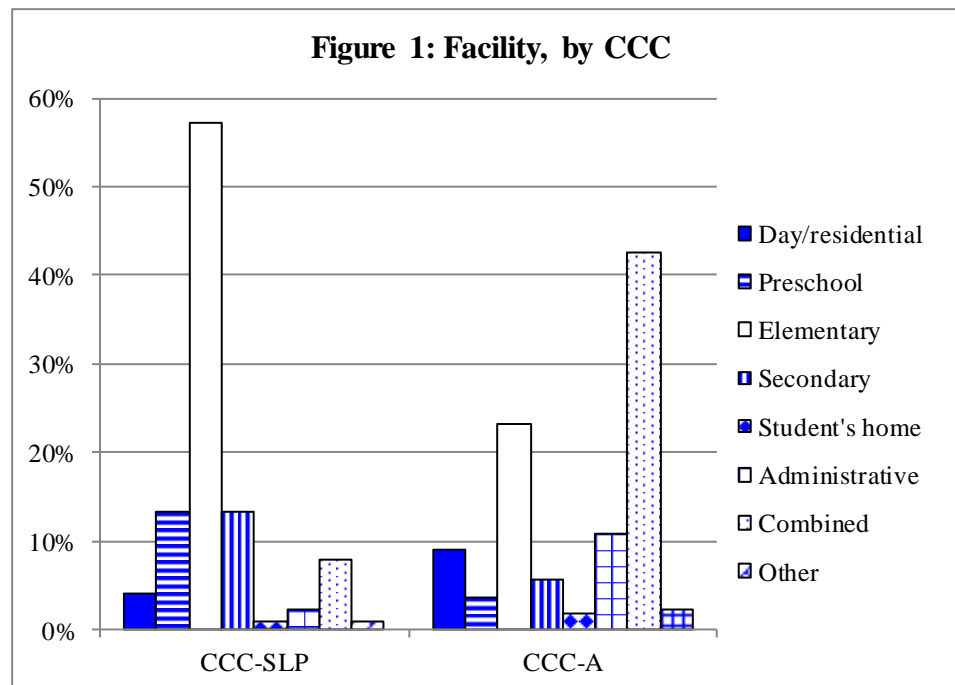
- 27% of SLPs and 17% of audiologists in the population—compared with 26% of SLPs and 16% of audiologists who replied to the survey—worked in the Northeast.
- 24% of SLPs and 26% of audiologists in the population—compared with 24% of SLPs and 27% of audiologists who replied to the survey—worked in the Midwest.
- 31% of SLPs and 33% of audiologists in the population—compared with 31% of SLPs and 32% of audiologists who replied to the survey—worked in the South.
- 18% of SLPs and 25% of audiologists in the population—compared with 18% of SLPs and 26% of audiologists who replied to the survey—worked in the West.

Employment Situation

Both SLPs (87%) and audiologists (91%) were more likely to be salaried employees than contract employees.

Primary Employment Facility

More SLPs were employed in *elementary* schools and more audiologists in *combined* settings than in any other facility type, as shown in Figure 1.



Note. For CCC-SLP,  $n = 2,094$ . For CCC-A,  $n = 201$ .  
 CCC-SLP = Certificate of Clinical Competence in Speech-Language Pathology; CCC-A = Certificate of Clinical Competence in Audiology; SLP = speech-language pathologist.

Excluded Facilities

Individuals who worked in an *other* type of facility have been included in the 2018 Schools Survey reports only as part of the total—not as a separate category of facility—because of the ambiguous nature of this small group of individuals. The small number of SLPs who worked in students’ homes ( $n = 22$ ) is also included in the total data for this group but is not broken out or shown separately.

Also included in the total are the small groups of audiologists who worked in special day/residential schools ( $n = 18$ ), preschools ( $n = 7$ ), secondary schools ( $n = 11$ ), students’ homes ( $n = 4$ ), and administrative offices ( $n = 24$ ).

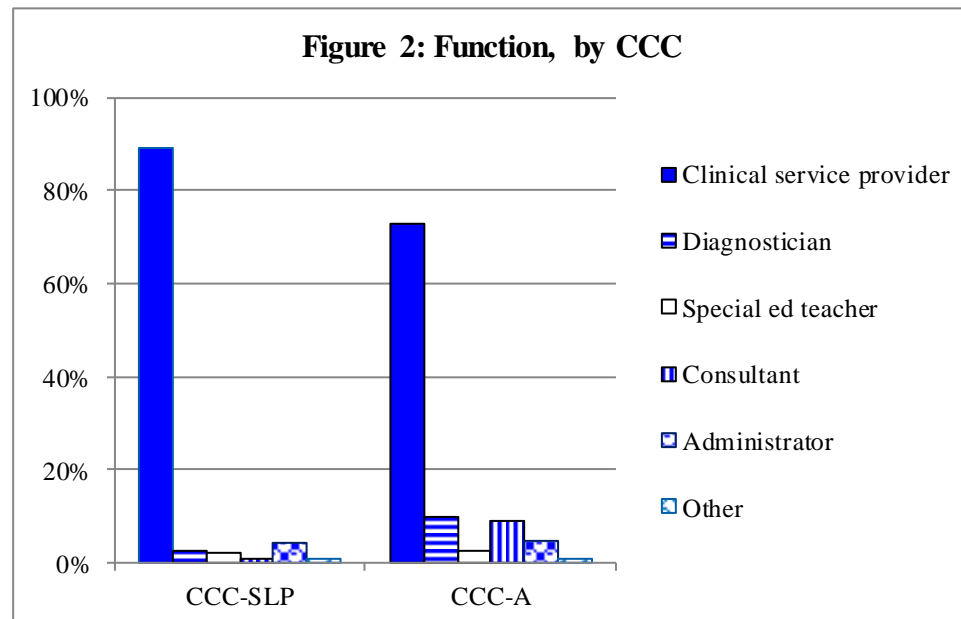
Sixteen SLPs and two audiologists did not identify a primary employment facility, despite being employed full- or part time.





**Primary Employment Function**

The vast majority of respondents were clinical service providers, including 89% of SLPs and 73% of audiologists (see Figure 2).



*Note.* For CCC-SLP,  $n = 2,094$ . For CCC-A,  $n = 201$ .  
 CCC-SLP = Certificate of Clinical Competence in Speech-Language Pathology; CCC-A = Certificate of Clinical Competence in Audiology; SLP = speech-language pathologist.

**Employment Status**

Being identified as employed full time or part time in the ASHA member database was one of the requirements for being included in the sample of ASHA constituents who received the *2018 Schools Survey*. Among those who responded, 82% of the SLPs and 88% of the audiologists worked full time. An additional 15% of SLPs and 12% of audiologists were employed part time. The remaining respondents identified themselves as currently unemployed.

**Salary Basis**

Most of the SLPs (87%) and most of the audiologists (90%) were paid an annual salary. The rest received an hourly wage.

**Highest Degree**

SLPs (1%) and audiologists (1%) were equally likely to have earned a PhD, but audiologists were much more likely than SLPs to have earned a clinical doctorate.

- 98% of SLPs and 44% of audiologists had earned a master’s as their highest degree.
- 54% of audiologists had earned an AuD degree as their highest degree.

**Age**

The mean age of the SLPs who responded to the survey was 44 years, and the median age was 43 years. The mean age of the audiologists who responded was 51 years, and the median was 52 years.

- Mean ages for SLPs were lowest in elementary schools (42) and highest in administrative offices (49;  $p = .000$ ).

**Years of Experience**

SLPs averaged 17 (mean) or 15 (median) years of experience in the *professions* and 14 (mean) or 12 (median) years of experience in the *schools*.

The type of facility where they worked had an effect on the mean number of years of experience for the SLPs.

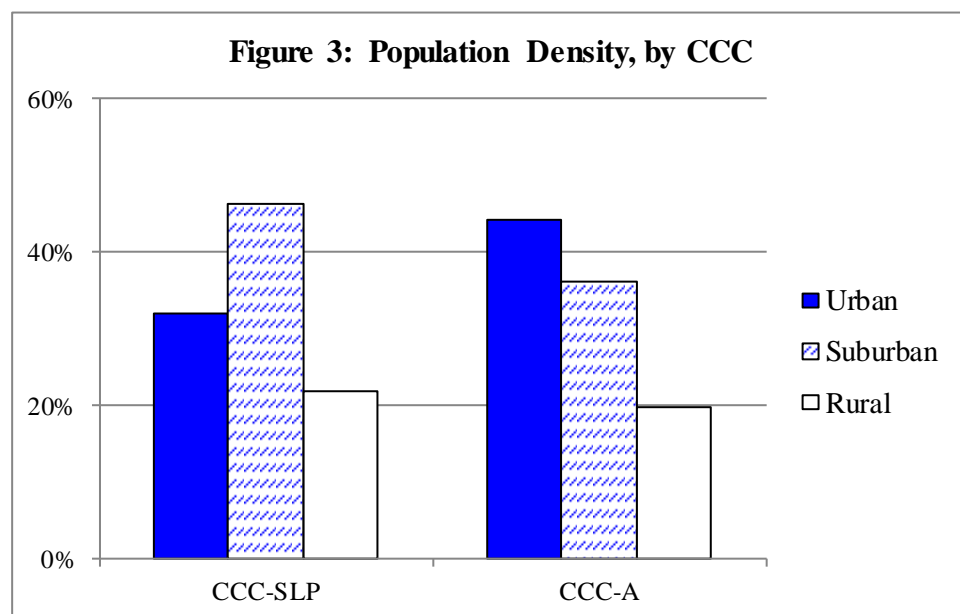
- SLPs who currently work in elementary schools averaged 16 years of experience in the *professions* compared with 21 years for those who currently work in administrative offices ( $p = .001$ ).
- SLPs who currently work in preschools, elementary schools, and secondary schools averaged 14 years of experience in the *schools* compared with 19 years for those who currently work in administrative offices ( $p = .000$ ).

Audiologists averaged more years of experience than did the SLPs. The mean number of years of experience that audiologists had in the *professions* was 24, and the median was 25 years. Audiologists averaged 17 years of experience in the *schools*. The median was 18 years.

**Population Density**

Nearly half (46%) of the SLPs who were employed either full time or part time worked in a suburban area (see Figure 3). The type of school setting was related to the locale in which SLPs worked ( $p = .000$ ).

- More than half of the SLPs in special day/residential schools (58%), preschools (52%), and secondary schools (52%) work in suburban areas.
- SLPs who work in administrative offices or combined settings were more likely than SLPs in other types of facilities to work in city/urban areas (40%).
- 28% of SLPs who work in combined settings were employed in rural areas—more than in any other type of facility (8%–24%).

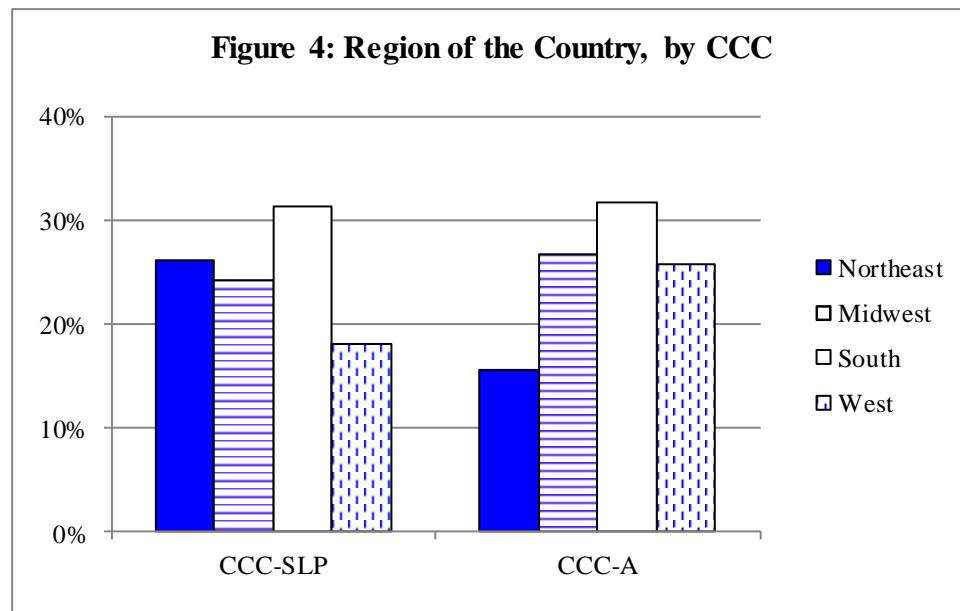


*Note.* For CCC-SLP,  $n = 2,072$ . For CCC-A,  $n = 196$ .  
 CCC-SLP = Certificate of Clinical Competence in Speech-Language Pathology; CCC-A = Certificate of Clinical Competence in Audiology; SLP = speech-language pathologist.

Geographic Distribution

Audiologists were more likely to work in city/urban areas (44%) or suburban areas (36%) than in rural areas (20%; see Figure 3).

As noted on page 4, the survey sample was stratified by state, but the respondents mirrored the population from which they were drawn almost identically on this demographic measure. Among the respondents, both SLPs and audiologists were more likely to work in the South (31% and 32%, respectively) than in other regions of the country. However, SLPs (26%) were much more likely than audiologists (16%) to work in the Northeast and were much less likely to work in the West (18% and 26%, respectively; see Figure 4).



Note. For CCC-SLP,  $n = 2,109$ . For CCC-A,  $n = 204$ .

CCC-SLP = Certificate of Clinical Competence in Speech-Language Pathology. CCC-A = Certificate of Clinical Competence in Audiology. SLP = speech-language pathologist.

Geographic distribution was related to type of facility for SLPs ( $p = .000$ ) but not for audiologists ( $p = .940$ ). Ranges for SLPs were between

- 16% in administrative offices and 51% in special day/residential schools for those who work in the Northeast;
- 14% who work in special day/residential schools and administrative offices and 28% who work in preschools in the Midwest;
- 21% of SLPs who work in preschools and 63% who work in administrative offices in the South; and
- a low of 6% who work in administrative offices and a high of 23% who work in preschools in the West.

## Reports

Results from the *2018 Schools Survey* are presented in a series of reports for SLPs:

- *SLP Caseload and Workload Characteristics*
- *SLP Workforce and Work Conditions*
- *SLP Practice Issues*
- *SLP Annual Salaries and Hourly Wages*
- *Survey Summary Report: Numbers and Types of Responses, SLPs*
- *Survey Methodology, Respondent Demographics, and Glossary*

Results from the educational audiologists are presented in a separate report: *Survey Summary Report: Numbers and Types of Responses, Educational Audiologists*.

## Suggested Citation

American Speech-Language-Hearing Association. (2018). *2018 Schools Survey report: Survey methodology, respondent demographics, and glossary*. Available from [www.asha.org/research/memberdata/schoolssurvey/](http://www.asha.org/research/memberdata/schoolssurvey/).

## Resources

Agresti, A., & Finlay, B. (1986). *Statistical methods for the social sciences* (2nd ed.). San Francisco, CA: Dellen.

Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method* (2nd ed.). New York, NY: Wiley.

## Thank You!

ASHA would like to thank the SLPs and audiologists who completed the *2018 Schools Survey*. Reports like this one are possible only because people like *you* participate.

**Is this information valuable to you?** If so, please accept invitations to participate in other ASHA-sponsored surveys and focus groups. You are the experts, and we rely on you to provide data to share with your fellow members. ASHA surveys benefit *you*.



## Additional Information

For additional information regarding the *2018 Schools Survey*, please contact Jaumeiko Coleman, director of ASHA's School Services, at 800-498-2071, ext. 8750 or [JColeman@asha.org](mailto:JColeman@asha.org). To learn more about how the Association is working on behalf of school-based ASHA Certified Members, visit the ASHA Schools web pages at [www.asha.org/slp/schools/](http://www.asha.org/slp/schools/).

## Glossary

The following is a glossary of terms used in the *2018 Schools Survey Reports*.

### Types of Facilities

- School:
- Special day/residential
  - Pre-elementary (preschool)
  - Elementary
  - Secondary school (middle school, junior high, senior high)
  - Student’s home
  - Administrative office
  - Combination from the above list
  - Other

Respondents self-identified their primary employment facility as one of the following types of schools: special day/residential, pre-elementary (preschool), elementary, secondary (middle school, junior high, senior high), student’s home, administrative office, combination from the above list, or “other.” Individuals from the “other” category are included when total responses are discussed, but they are not presented as a separate type of facility because their numbers were fairly small (22 SLPs and four audiologists) and because of the uncertain nature of the category.



### Random Sample

A stratified sample of 4,500 ASHA-certified SLPs and 500 ASHA-certified audiologists was randomly selected to participate in this survey. A *random sample* is a probabilistic sample in which each person has an equal chance of being selected. A sample is stratified when the population is divided into separate groups (i.e., strata), and a random sample is drawn from each stratum. In this survey, there were 51 strata: the 50 U.S. states plus the District of Columbia.

### Response Rate

The response rate was calculated using the following equation:

$$RR = \frac{(C + P)}{(S + ID) - (Ret + I)}$$

- where
- RR = Response rate
  - C = Number of completed surveys
  - P = Number of partial surveys
  - S = Sample size
  - ID = Ripped off identification number
  - Ret = Ineligible because of retirement
  - I = Ineligible for other reasons (e.g., does not work in a school, is no longer in the discipline)

$$RR = \frac{2,374}{(5,000 + 5) - (9 + 51)} = 48.0\%$$

**Measures of Central Tendency**

**Mean:** To find the mean, add the total of all the values, and divide by  $n$  (the number of items).

**Median:** To find the median, arrange the values in order, from lowest to highest. Then, select the value in the middle position.

**Mode:** The mode is the value that occurs more often than any other.

**Example:** Sample data set

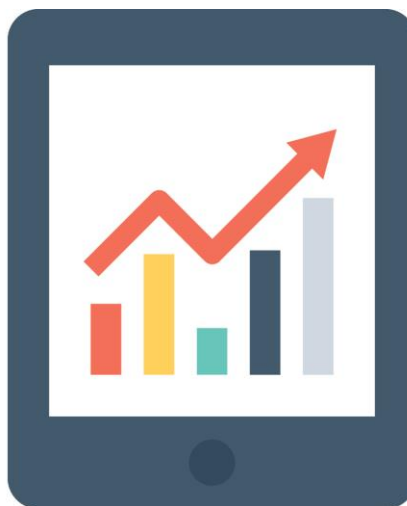
1, 1, 7, 34, 88

Mean:  $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$

Median: 7

Mode: 1

The statistic that is reported most often in the *2018 Schools Survey* is the median (middle) statistic unless otherwise noted. Median statistics are presented because they are more stable and less sensitive to extreme values than are mean values.



**Statistical Significance**

$p$  value refers to probability. It is found in expressions such as  $p = .04$ , meaning “There is a 4% chance of observing a difference as large as the one that you observed even if the two population means are identical (the null hypothesis is true).” The smaller the number, the less likely that the result was due to chance.

A  $z$ -score (also known as a standard score) indicates how many standard deviations a score is from the mean.

Appendix A

Cover Letters



February 14, 2018

ID number

Name

Address

City, State Zip

Dear Salutation LastName,

**Why should I participate?** You have been chosen as part of a statistically selected, representative sample of speech-language pathologists to receive the *2018 ASHA Schools Survey*. Your response to this survey will help ensure that the results accurately reflect the opinions of speech-language pathologists employed in a school setting. Results are used

- as a source of salary data reported by the U.S. Bureau of Labor Statistics <https://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm>;
- by members to compare their situation with peers; and
- by ASHA volunteer leaders and staff in advocacy efforts.

**Are my answers confidential?** Your answers will be released only as summaries in which no individual's responses can be identified. The information you provide is NEVER added to your membership record. Surveys have been numbered only to enable us to send reminders to individuals who do not return their completed forms, and the list of names and addresses for that purpose is stored in a separate file that is never merged with the data file.

**How can I help?** This survey is voluntary. However, you can help by taking a few minutes to share your opinions and experiences with the Association and returning your completed survey within the next 2 weeks. If, for some reason, you prefer not to respond, please return the blank questionnaire, and let us know why. Follow-up requests will be mailed to sample members who do not respond.

**Questions?** If you have any questions, please contact Jeanette Janota in the National Office's Science and Research Unit at [jjanota@asha.org](mailto:jjanota@asha.org) or at 800-498-2071, ext. 8738.

**Thank you very much** for participating in this important data collection effort. The sheet of stickers is yours to keep as a token of our appreciation.

Sincerely,

A handwritten signature in black ink that reads "Arlene A. Pietranton". The signature is written in a cursive, flowing style.

Arlene A. Pietranton, PhD, CAE

Chief Executive Officer

American Speech-Language-Hearing Association





February 14, 2018

ID number  
Name  
Address  
City, State Zip

Dear Salutation LastName,

**Why should I participate?** You have been chosen as part of a statistically selected, representative sample of school-based speech-language pathologists to receive the *2018 ASHA Schools Survey*.

**Are my answers confidential?** Your answers will be released only as summaries in which no individual's responses can be identified.

**How quickly should I respond?** Surveys have been numbered only to enable us to send reminders to individuals who do not return their completed forms. Follow-up requests will be mailed to sample members who do not respond by the end of the month.

**How can I help?** If, for some reason, you prefer not to respond, please return the blank questionnaire, and let us know why.

**Questions?** If you have any questions, please contact Jeanette Janota in the National Office's Science and Research Unit at [jjanota@asha.org](mailto:jjanota@asha.org) or at 800-498-2071, ext. 8738.

**Thank you very much** for participating in this important data collection effort. The sheet of stickers is yours to keep as a token of our appreciation.

Sincerely,

Arlene A. Pietranton, PhD, CAE  
Chief Executive Officer  
American Speech-Language-Hearing Association

Appendix B

States by Regions and Divisions

## Regions of the Country

### Northeast

- ◆ Middle Atlantic
  - New Jersey
  - New York
  - Pennsylvania
- ◆ New England
  - Connecticut
  - Maine
  - Massachusetts
  - New Hampshire
  - Rhode Island
  - Vermont

### South

- ◆ East South Central
  - Alabama
  - Kentucky
  - Mississippi
  - Tennessee
- ◆ South Atlantic
  - Delaware
  - District of Columbia
  - Florida
  - Georgia
  - Maryland
  - North Carolina
  - South Carolina
  - Virginia
  - West Virginia
- ◆ West South Central
  - Arkansas
  - Louisiana
  - Oklahoma
  - Texas

### Midwest

- ◆ East North Central
  - Illinois
  - Indiana
  - Michigan
  - Ohio
  - Wisconsin
- ◆ West North Central
  - Iowa
  - Kansas
  - Minnesota
  - Missouri
  - Nebraska
  - North Dakota
  - South Dakota
- ◆ Mountain
  - Arizona
  - Colorado
  - Idaho
  - Montana
  - Nevada
  - New Mexico
  - Utah
  - Wyoming

### West

- ◆ Pacific
  - Alaska
  - California
  - Hawaii
  - Oregon
  - Washington