2018 Schools SURVEY

Survey Summary Report:
Numbers and Types of Responses,
Educational Audiologists

Contents

Sampling and Response Rates

Probability (nonreplacement) sampling using a stratified systematic technique was used to select a sample of 500 ASHA-certified educational audiologists for the *2018 Schools Survey*. The sample was stratified by state, and data have been weighted to reflect their proportion by state within the Association. Small groups, such as audiologists who work in Wyoming and Montana, were oversampled so that sufficient numbers from these groups could be included in the sample.

An additional 4,500 ASHA-certified speech-language pathologists (SLPs) with schools as their primary employment facility were also selected. Their results are in a separate report. This report is limited to responses from individuals with a Certificate of Clinical Competence in Audiology (CCC-A) only.

An overall response rate of 48.0% was obtained for audiologists and SLPs combined (2,374 completed surveys from a net sample of 4,946 eligibles). The response rate for audiologists was **41.3%** (204 completed surveys from a net sample of 494 eligible respondents). These percentages are unweighted.

Data were weighted for all tables in the report. The "All Facility Types" column throughout the report reflects results for respondents from the two facility types as well as from the 18 respondents who were employed in special day/residential schools, seven in preschools, 11 in secondary schools, four in students' homes, 24 in administrative offices, four employed in "other" types of facilities, and respondents who did not answer the question about facility type. Therefore, the "All Facility Types" column may not be the sum of the *n*s in the other two columns.

Data are not presented for table cells with fewer than 25 respondents.

Few questions in the survey resulted in statistically significant differences; that is, it was rare that the responses from audiologists in elementary schools differed from those in combined school settings. One reason for this may be that, for an unknown number of respondents, combined settings included employment in elementary schools as one of the facilities in which they were employed.

Tests of statistical significance are presented throughout the report as appropriate. Conclusions are not presented with each question in order to keep the data tables as uncluttered as possible. However, the following conclusions can be used, depending on the result of the significance testing (see Table 1 for examples). In the first row, where the probability is less than .05 and is bolded, it is possible to discuss differences in responses by facility; in the second and third rows, that is not the case.

Table 1. Significance Tests and Conclusions	
Sample Significance Test	**Sample Conclusion**
Statistical significance: $\chi^2(2) = 114.9$, **$p = .000$**	Conclusion: There is adequate evidence from the data to say that the responses vary by type of facility. The p value is less than .05.
Statistical significance: $\chi^2(2) = 2.3$, $p = .320$	Conclusion: There is not enough evidence from the data to say that the responses vary by type of facility. The p value is greater than .05.
Too many cells (25%) have an expected count of fewer than 5.	Conclusion: Too little data are available in some categories to test whether responses vary by type of facility.

A description of statistical terms used in the report can be found in the Appendix at the end of the report.
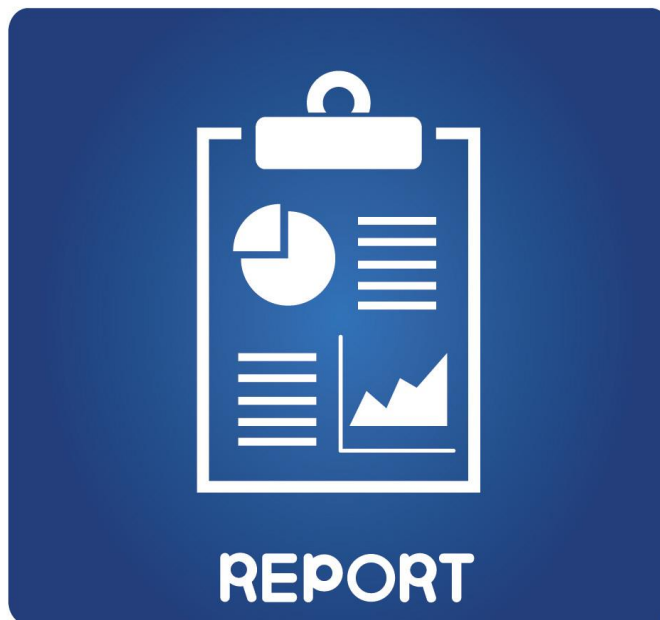
ASHA Services and Programs

1. In your opinion, what kind of job is the Association doing in serving its school-based members? (Percentages)
    Analyses limited to respondents who met the following criterion:
    ❖ CCC-A

Response	Facility Type		
	All Facility Types **(*n* ≥ 198)**	**Elementary** **(*n* ≥ 45)**	**Combination** **(*n* ≥ 84)**
Overall			
Poor	4.4	10.6	1.2
Fair	33.0	42.6	34.1
Good	44.1	36.2	45.9
Excellent	3.5	0.0	7.1
Don't know, NA	15.0	10.6	11.8
		Too many cells (40%) have an expected count of less than 5.	
With Advocacy			
Poor	6.7	20.0	2.4
Fair	30.4	26.7	38.1
Good	36.9	33.3	35.7
Excellent	5.3	2.2	9.5
Don't know, NA	20.8	17.8	14.3
		Too many cells (20%) have an expected count of less than 5.	
With Continuing Education			
Poor	4.7	8.9	2.4
Fair	33.2	48.9	30.6
Good	38.8	22.2	43.5
Excellent	7.5	4.4	10.6
Don't know, NA	15.8	15.6	12.9
		Too many cells (30%) have an expected count of less than 5.	
With Evidence-Based Resources			
Poor	3.2	6.5	1.2
Fair	28.1	45.7	25.9
Good	44.2	26.1	52.9
Excellent	7.4	4.3	8.2
Don't know, NA	17.0	17.4	11.8
		Too many cells (30%) have an expected count of less than 5.	

1. (cont'd) In your opinion, what kind of job is the Association doing in serving its school-based members? (Percentages)
    Analyses limited to respondents who met the following criterion:
    ❖ CCC-A

Response	Facility Type		
	All Facility Types (*n* ≥ 198)	**Elementary (*n* ≥ 45)**	**Combination (*n* ≥ 84)**
With Questions About School-Based Practice			
Poor	6.3	6.5	4.8
Fair	33.6	47.8	32.1
Good	33.7	23.9	40.5
Excellent	3.3	0.0	4.8
Don't know, NA	23.1	21.7	17.9
		Too many cells (40%) have an expected count of less than 5.	

Workforce

2. <u>CCC-A ONLY</u>. Based on your own observations and experiences, rate the current job market for <u>audiology</u> clinical service providers in your type of employment facility and in your geographic area. (Percentages)

Response	Facility Type		
	All Facility Types (*n* = 196)	**Elementary (*n* = 44)**	**Combination (*n* = 83)**
More job openings than job seekers	25.0	29.5	28.9
Job openings and job seekers in balance	32.6	31.8	36.1
Fewer job openings than job seekers	42.4	38.6	34.9
		Statistical significance: $\chi^2(2) = 0.3$, *p* = .875	

3. <u>CCC-SLP ONLY</u>. Based on your own observations and experiences, rate the current job market for <u>speech-language pathology</u> clinical service providers in your type of employment facility and in your geographic area. (Percentages)
    Analyses limited to respondents who met the following criterion:
    ❖ CCC-SLP

Response	Facility Type		
	All Facility Types	**Elementary**	**Combination**
More job openings than job seekers			
Job openings and job seekers in balance	See *Survey Summary Report: Numbers and Types of Responses, SLPs*		
Fewer job openings than job seekers			

4. What are your greatest challenges as a school-based professional? *Select all that apply.* (Percentages) Responses were in alphabetical order on survey instrument. Analyses limited to respondents who met the following criterion:
   ❖ CCC-A

Challenge	Facility Type		
	All Facility Types (*n* = 204)	**Elementary School (*n* ≥ 46)**	**Combination (*n* ≥ 85)**
Budget constraints	65.7	57.4	73.3
		Statistical significance: $\chi^2(1) = 3.5$, *p* = .081	
Limited parental involvement and support	50.1	46.8	52.3
		Statistical significance: $\chi^2(1) = 0.4$, *p* = .589	
High workload/caseload size	49.8	48.9	61.6
		Statistical significance: $\chi^2(1) = 2.0$, *p* = .200	
Limited understanding of my role by others	46.3	46.8	50.6
		Statistical significance: $\chi^2(1) = 0.2$, *p* = .719	
Large amount of paperwork	38.0	41.3	44.7
		Statistical significance: $\chi^2(1) = 0.1$, *p* = .854	
Incorporating optimal service delivery models	35.6	29.8	35.3
		Statistical significance: $\chi^2(1) = 0.4$, *p* = .567.	
Limited support from the administration	33.6	27.7	36.0
		Statistical significance: $\chi^2(1) = 1.0$, *p* = .344	
Low salary	31.2	30.4	33.7
		Statistical significance: $\chi^2(1) = 0.1$, *p* = .846	
Inadequate work space and facilities	29.6	42.6	30.2
		Statistical significance: $\chi^2(1) = 2.0$, *p* = .183	
Limited time for collaboration	28.4	25.5	32.6
		Statistical significance: $\chi^2(1) = 0.7$, *p* = .435	
		(Question 4 continues on next page.)	

4. (cont'd) What are your greatest challenges as a school-based professional? *Select all that apply*. (Percentages) Responses were in alphabetical order on survey instrument. Analyses limited to respondents who met the following criterion:
  ❖ CCC-A

Challenge	Facility Type		
	All Facility Types (*n* = 204)	**Elementary School (*n* ≥ 46)**	**Combination (*n* ≥ 85)**
Travel/distance between schools	26.2	21.3	36.5
		Statistical significance: $\chi^2(1) = 3.3$, $p = .080$	
Out-of-pocket professional expenses	21.1	23.4	23.5
		Statistical significance: $\chi^2(1) = 0.0$, $p = 1.0$	
Personnel shortage	16.2	19.1	18.6
		Statistical significance: $\chi^2(1) = 0.0$, $p = 1.0$	
Lack of training to work with specific disorders or special populations	12.1	12.8	10.6
		Statistical significance: $\chi^2(1) = 0.1$, $p = .777$	
Legal challenges (e.g., due process)	11.8	8.7	16.5
		Statistical significance: $\chi^2(1) = 1.5$, $p = .291$	
Ethical challenges	11.5	10.6	10.6
		Too many cells (25%) have an expected count of less than 5.	
Medicaid billing	11.0	6.4	15.3
		Statistical significance: $\chi^2(1) = 2.3$, $p = .169$	

Employment and Earnings

5.   Which one of the following categories best describes your employment status? (Percentages)

Analyses limited to respondents who met the following criterion:
   ❖   CCC-A

Response	Facility Type		
	All Facility Types (*n* = 204)	**Elementary School** (*n* = 46)	**Combination** (*n* = 86)
Employed full time	87.7	91.3	88.4
Employed part time	12.3	8.7	11.6
Not currently employed (SKIP to Q 27.)	Removed from analyses		
		Too many cells (25%) have an expected count of less than 5.	

6.   Which one of the following best describes your principal employment situation? (Percentages)

Analyses limited to respondents who met the following criteria:
   ❖   CCC-A
   ❖   Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 201)	**Elementary School** (*n* = 45)	**Combination** (*n* = 86)
Salaried employee, full time or part time	91.4	86.7	93.0
Contractor, full time or part time	8.6	13.3	7.0
		Too many cells (25%) have an expected count of less than 5.	

7. Although you may work in several types of facilities, select the <u>one</u> type of building that best describes where you work all or <u>most</u> of the time. *For individuals who work in private practice or early intervention, select the type of building in which you deliver most of your services. Only one response can be accepted.* (Percentages)
    Analyses limited to respondents who met the following criteria:
    - ❖ CCC-A
    - ❖ Employed full time or part time

Facility	*n*	Percentages
Special day/residential school	18	9.1
Pre-elementary (preschool)	7	3.6
Elementary school	47	23.2
Secondary school (middle school, junior high, senior high)	11	5.6
Student's home	4	1.8
Administrative office	24	11.9
Combination from the above list	86	42.5
Other; specify:	4	2.2

8. Although you may perform more than one job function, select the <u>one</u> position that best describes how you spend <u>most</u> of your time. *Only one response can be accepted.* (Percentages)
    Analyses limited to respondents who met the following criteria:
    - ❖ CCC-A
    - ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 201)	Elementary School (*n* = 46)	Combination (*n* = 85)
Clinical service provider (includes all individuals providing any direct service)	72.7	71.7	82.4
Diagnostician	9.7	10.9	7.1
Special education teacher	2.6	6.5	0.0
Consultant	9.2	8.7	7.1
Administrator/supervisor/ director	4.9	2.2	2.4
Other; specify:	1.0	0.0	1.2
		Too many cells (67%) have an expected count of less than 5.	

9. In your primary job, are you paid on an annual basis or an hourly basis? *Select one response only.* (Percentages)
      Analyses limited to respondents who met the following criteria:
           ❖ CCC-A
           ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 202)	Elementary School (*n* = 47)	Combination (*n* = 85)
Annual salary	89.7	91.5	88.2
Hourly rate (SKIP to Q 12.)	10.3	8.5	11.8
		Too many cells (25%) have an expected count of less than 5.	

10. What is your gross annual income for your primary job, before all deductions?
      Analyses limited to respondents who met the following criteria:
           ❖ CCC-A
           ❖ Employed full time
           ❖ Annual salary of at least $1

Response	Facility Type		
	All Facility Types	Elementary School	Combination
Worked 9–10 months (academic year)			
	n = 120	*n* = 30	*n* = 51
25th percentile	$58,000	$51,990	$59,214
50th percentile (**Median**)	$67,000	$65,000	$69,964
75th percentile	$83,000	$80,000	$87,093
Mean	$69,515	$65,811	$71,247
Standard deviation	$19,443	$22,818	$18,264
Mode	$60,000	$103,000	$60,000
		Statistical significance: $F(1, 79) = 1.4$, $p = .243$	
Worked 11–12 months (calendar year)			
	n = 38	*n* = 3	*n* = 18
25th percentile	$68,551		
50th percentile (**Median**)	$80,000		
75th percentile	$95,000	(*n* < 25)	(*n* < 25)
Mean	$82,009		
Standard deviation	$16,669		
Mode	$80,000		

11. For what period of <u>work</u> is this? *If you work for 9–10 months but are paid over a 12-month period, select response "1." Select one response only; then SKIP to Q 14.* (Percentages)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Employed full time or part time
- ❖ Annual salary of at least $1

Response	Facility Type		
	All Facility Types **(*n* = 164)**	**Elementary School** **(*n* = 33)**	**Combination** **(*n* = 72)**
1 – Work 9 or 10 months per year	76.6	90.9	75.0
2 – Work 11 or 12 months per year	23.4	9.1	25.0
3 – Work other period	Removed from analyses		
		Statistical significance: $\chi^2(1) = 3.6$, $p = .069$	

12. If you are paid on an <u>hourly basis</u>, what is the hourly rate you receive at your primary job? *Include your hourly rate <u>before</u> all deductions.*

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Hourly salary of at least $1
- ❖ Worked at least 1 hour per week

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
26 or fewer hours			
	n = 10	*n* = 2	*n* = 3
25th percentile	(*n* < 25)	(*n* < 25)	(*n* < 25)
50th percentile (**Median**)			
75th percentile			
Mean			
Standard deviation			
Mode			
More than 26 hours			
	n = 9	*n* = 2	*n* = 5
25th percentile	(*n* < 25)	(*n* < 25)	(*n* < 25)
50th percentile (**Median**)			
75th percentile			
Mean			
Standard deviation			
Mode			

Response	Facility Type		
	All Facility Types (n = 19)	Elementary School (n = 4)	Combination (n = 9)
25th percentile			
50th percentile (**Median**)			
75th percentile	(n < 25)	(n < 25)	(n < 25)
Mean			
Standard deviation			
Mode			

13. How many hours do you work per week for the hourly rate you entered in Q 12?
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Hourly salary of at least $1

Performance Evaluation

14. What system or tool is used to evaluate your performance? *Select all that apply.*
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (n = 204)	Elementary School ($n \geq$ 46)	Combination ($n \geq$ 85)
A performance evaluation system that is also used for classroom teachers	46.6	55.3	43.0
		Statistical significance: $\chi^2(1) = 1.8$, $p = .205$	
A performance evaluation system that is customized for audiologists or SLPs	26.0	29.8	24.7
		Statistical significance: $\chi^2(1) = 0.4$, $p = .543$	
The ASHA Performance Assessment of Contributions and Effectiveness of SLPs (PACE)	0.0	0.0	0.0
Other, specify:*	25.7	13.0	31.4
		Statistical significance: $\chi^2(1) = 5.4$, ***p* = .021**	

*Includes *none* as a response.

Caseload

15.	Do you provide clinical services (i.e., either diagnostics or treatment services) to students? (Percentages)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 143)	**Elementary School** (*n* = 32)	**Combination** (*n* = 67)
Yes	95.6	93.8	94.0
No (SKIP to Q 23.)	4.4	6.3	6.0
		Too many cells (50%) have an expected count of less than 5.	

16. What is your average <u>monthly</u> caseload size? *Count each student only once.*

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response greater than 0

Response	Facility Type		
	All Facility Types (*n* = 98)	**Elementary School** (*n* = 25)	**Combination** (*n* = 46)
25th percentile	40.0	40.0	45.0
50th percentile (**Median**)	60.0	61.1	65.0
75th percentile	80.0	83.6	80.0
Mean	65.8	64.4	67.6
Standard deviation	37.6	36.4	33.2
Mode	50.0	100.0	80.0
		Statistical significance: $F(1, 68) = 0.1$, $p = .710$	

17. Indicate how many students you serve monthly in each of the following areas.
    Students who have overlapping areas of intervention may be counted more than once.
    Analyses limited to respondents who met the following criteria:
    - ❖ CCC-A
    - ❖ Clinical service provider
    - ❖ Employed full time
    - ❖ Response to Q 16 (caseload size) is at least 1

Response	Facility Type			
	All Facility Types		Elementary School	
	Percentage who regularly serve clients with this disorder	Number served (mean)*	Percentage who regularly serve clients with this disorder	Number served (mean)*
	n = 98	*n* varies	*n* = 25	*n* varies
Acquired brain injury (ABI)	15.9	(*n* < 25)	10.9	(*n* < 25)
Auditory processing disorder (APD)	46.2	5.7	60.2	
Autism spectrum disorder (ASD)	53.0	12.8	76.0	
Childhood apraxia of speech (CAS)	14.0	(*n* < 25)	21.6	
Cognitive communication disorders	21.2		32.7	
Dysphagia (swallowing/ feeding)	6.4		8.5	
Fluency disorders	15.3		20.7	
Hearing loss	92.1	47.8	88.2	
Language disorders: pragmatics/social communication	31.5	26.9	41.9	
Language disorders: semantics, morphology, syntax	27.9	25.9	44.3	
Nonverbal, augmentative and alternative communication (AAC)	26.8	4.9	33.1	
Reading and writing (literacy)	15.3	(*n* < 25)	17.3	
Selective mutism	3.3		4.5	
Speech sound disorders	22.9		28.3	
Voice or resonance disorders	7.4		12.4	

(Question 17 continues on next page.)

*Includes only audiologists who do serve these students.

17. (cont'd) Indicate how many students you serve monthly in each of the following areas. *Students who have overlapping areas of intervention may be counted more than once.* Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q 16 (caseload size) is at least 1

	Facility Type	
Response	**Combination**	
	Percentage who regularly serve clients with this disorder	**Number served (mean)***
	n = 46	*n* varies
Acquired brain injury (ABI)	23.6	(*n* < 25)
Auditory processing disorder (APD)	43.6	
Autism spectrum disorder (ASD)	44.8	
Childhood apraxia of speech (CAS)	8.4	
Cognitive communication disorders	16.9	
Dysphagia (swallowing/feeding)	4.6	
Fluency disorders	14.7	
Hearing loss	91.6	60.1
Language disorders: pragmatics/ social communication	21.4	(*n* < 25)
Language disorders: semantics, morphology, syntax	17.7	
Nonverbal, augmentative and alternative communication (AAC)	22.4	
Reading and writing (literacy)	16.5	
Selective mutism	4.6	
Speech sound disorders	15.8	
Voice or resonance disorders	4.6	

*Includes only audiologists who do serve these students.

18. What is the approximate number of students in your caseload receiving the following amount of therapy <u>per week</u>?

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q 16 (caseload size) is at least 1

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
Up to 1 hour			
	n = 36	*n* = 14	*n* = 17
25th percentile	20.7		
50th percentile (**Median**)	36.0		
75th percentile	67.3	(*n* < 25)	(*n* < 25)
Mean	42.4		
Standard deviation	27.4		
Mode	25.0		
Between 1 and 5 hours			
	n = 11	*n* = 6	*n* = 3
25th percentile			
50th percentile (**Median**)			
75th percentile		(*n* < 25)	(*n* < 25)
Mean			
Standard deviation			
Mode			
More than 5 hours			
	n = 1	*n* = 0	*n* = 1
25th percentile			
50th percentile (**Median**)			
75th percentile	(*n* < 25)	(*n* < 25)	(*n* < 25)
Mean			
Standard deviation			
Mode			

19. How many hours do you spend on each of the following activities in a typical <u>WEEK</u>? *Enter "0" if none.* (Mean hours)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q 16 (caseload size) is at least 1
- ❖ Total number of hours for Q 19 was limited to a maximum of 52, which captured 97% of respondents

| Activity	Facility Type		
	All Facility Types **(*n* = 84)**	**Elementary School** **(*n* = 20)**	**Combination** **(*n* = 39)**
MTSS/RTI activities	2.6		3.1
Diagnostic evaluations (e.g., observation, screening, scoring, analysis)	15.7		13.6
Direct intervention: classroom based/ integrated services	9.2		6.2
Direct intervention: pullout	7.9	(*n* < 25)	5.7
Collaborative consultation	5.2		5.5
Services to section 504 students	3.6		3.9
Technological support (e.g., hearing aids/CIs, AAC)	11.0		12.1
Supervision	5.4		4.6
		Tests of significance could not be run using the available software.	

Note. MTSS = multi-tiered system of support; RTI = response to intervention; CI = cochlear implant; AAC = augmentative and alternative communication.

20. Under what circumstances are you required to make up missed sessions? *Select all that apply.* (Percentages)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 146)	**Elementary School (*n* ≥ 33)**	**Combination (*n* ≥ 69)**
I am not required to make up missed sessions.	37.1	32.4	40.0
		Statistical significance: $\chi^2(1) = 0.6$, *p* = .521	
When the student misses a session due to assembly or classroom activity.	9.8	9.1	10.1
		Too many cells (25%) have an expected count of less than 5.	
Any time a student misses a session for any reason.	11.7	17.6	10.0
		Too many cells (25%) have an expected count of less than 5.	
Any time I miss a session for any reason.	27.1	24.2	29.0
		Statistical significance: $\chi^2(1) = 0.3$, *p* = .813	
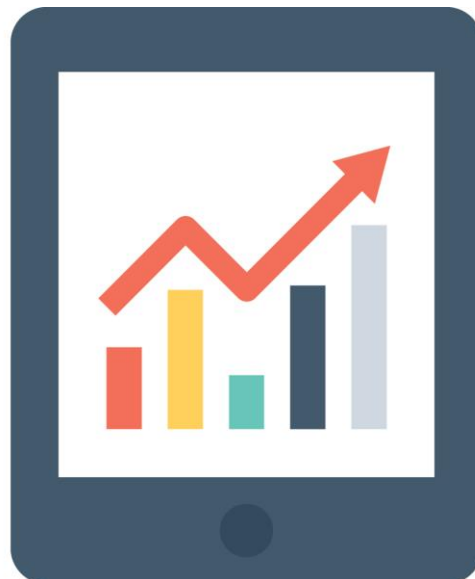
21. What is your role on the multi-tiered system of support (MTSS)/response to intervention (RTI) or pre-referral team? *Select all that apply.* (Percentages)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time

Response	Facility Type		
	All Facility Types (*n* = 146)	**Elementary School** (*n* = 33)	**Combination** (*n* ≥ 69)
Conduct screenings.	38.1	51.5	36.2
		Statistical significance: $\chi^2(1)$ = 2.2, *p* = .197	
Provide consultation as a member of the pre-referral team.	36.4	36.4	41.4
		Statistical significance: $\chi^2(1)$ = 0.2, *p* = .671	
Provide direct services within general education.	20.0	39.4	17.4
		Statistical significance: $\chi^2(1)$ = 5.8, ***p* = .026**	
Provide strategies to classroom teachers.	40.1	57.6	38.6
		Statistical significance: $\chi^2(1)$ = 3.3, *p* = .090	
Not applicable; I don't participate in MTSS/ RTI or pre-referral.	38.4	24.2	38.6
		Statistical significance: $\chi^2(1)$ = 2.1, *p* = .185	

Birth Through Five

22. Select up to three (3) of the top issues that affect your work with children 5 and under. (Percentages)

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Clinical service provider

Issue	Facility Type		
	All Facility Types (n =125)	**Elementary School** (n = 26)	**Combination** ($n \geq 60$)
Changing eligibility criteria that exclude children who need services	14.8	3.8	20.0
		Too many cells (25%) have an expected count of less than 5.	
Inadequate reimbursement or funding for services	14.1	15.4	18.3
		Too many cells (25%) have an expected count of less than 5.	
Lack of qualified providers to deliver services	29.6	19.2	31.7
		Statistical significance: $\chi^2(1) = 1.4$, $p = .301$	
Lack of sufficient training or professional development for audiologists or SLPs	20.4	19.2	26.7
		Statistical significance: $\chi^2(1) = 0.5$, $p = .589$	
Other professionals taking primary role in communication or swallowing services	5.3	0.0	8.2
		Too many cells (50%) have an expected count of less than 5.	
Parents who are not receptive to coaching	33.7	50.0	30.0
		Statistical significance: $\chi^2(1) = 3.1$, $p = .091$	
Serving as primary provider in areas outside my scope	3.8	11.5	3.3
		Too many cells (50%) have an expected count of less than 5.	
None of the above or NA	41.6	38.5	36.7
		Statistical significance: $\chi^2(1) = 0.0$, $p = 1.0$	

Supervision

23. Within your professional area (i.e., audiology or speech-language pathology), how qualified are you to supervise audiology or SLP assistants?
Scale: 1 = *Not at all qualified* → 5 = *Very qualified*
Analyses limited to respondents who met the following criterion:
   ❖ CCC-A

Activity	Facility Type		
	All Facility Types (*n* = 178)	Elementary School (*n* = 41)	Combination (*n* = 75)
1 – *Not at all qualified*	3.6	7.3	1.3
2	1.1	0.0	0.0
3	12.8	19.5	12.0
4	24.6	22.0	29.3
5 – *Very qualified*	58.0	51.2	57.3
		Too many cells (25%) have an expected count of less than 5.	

24. How many audiology or SLP assistants do you currently supervise? *Put "0" if none. If "0," skip to Q 26.*
Analyses limited to respondents who met the following criteria:
   ❖ CCC-A
   ❖ Clinical service provider or diagnostician
   ❖ Employed full time or part time
   ❖ Response greater than 0

Response	Facility Type		
	All Facility Types (*n* = 32)	Elementary School (*n* = 7)	Combination (*n* = 16)
25th percentile	1.0		
50th percentile (**Median**)	1.0		
75th percentile	2.0	(*n* < 25)	(*n* < 25)
Mean	1.5		
Standard deviation	0.7		
Mode	1.0		

25. How does supervision of the audiology or SLP assistant impact your caseload and workload? *"Caseload" is based only on the number of students served, whereas "workload" is based on **ALL** required and performed activities.* (Percentages)
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Clinical service provider or diagnostician
    ❖ Employed full time or part time
    ❖ Response to Q 24 (number of aides) is greater than 0

Activity	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
Caseload			
	n = 31	*n* = 7	*n* = 15
Increases my caseload	5.4		
Decreases my caseload	14.1	(*n* < 25)	(*n* < 25)
No impact on my caseload	75.7		
Don't know, NA (caseload)	4.8		
Workload			
	n = 32	*n* = 7	*n* = 16
Increases my workload	53.3		
Decreases my workload	20.8	(*n* < 25)	(*n* < 25)
No impact on my workload	21.2		
Don't know, NA (workload)	4.7		

Ethics

Challenge	Facility Type		
26. Which of the issues below present you with significant ethical challenges? *Select all that apply.* (Percentages) Responses were in alphabetical order on survey instrument. Analyses limited to respondents who met the following criterion: ❖ CCC-A			
	All Facility Types (n = 204)	**Elementary School** ($n \geq 46$)	**Combination** ($n \geq 85$)
Adhering to administrative and regulatory mandates	23.1	25.5	25.6
		Statistical significance: $\chi^2(1) = 0.0$, $p = 1.0$	
Compromising quality of services	22.9	27.7	26.7
		Statistical significance: $\chi^2(1) = 0.0$, $p = 1.0$	
Feeling pressured by an employer, administrator, or supervisor to provide or deny a service, report scores, etc., that would be in violation of the ASHA Code of Ethics	10.8	17.4	8.2
		Statistical significance: $\chi^2(1) = 2.5$, $p = .151$	
Completing Medicaid billing	9.1	6.5	9.4
		Too many cells (25%) have an expected count of less than 5.	
Reading confidential or inappropriate information about a student posted by an audiologist or SLP on social media	4.1	0.0	5.8
		Too many cells (50%) have an expected count of less than 5.	
Supervising support personnel, CFs, etc.	2.4	0.0	1.2
		Too many cells (50%) have an expected count of less than 5.	
None of the above	53.2	57.4	45.9
		Statistical significance: $\chi^2(1) = 1.6$, $p = .275$	

Note. CF = Clinical Fellowship.

Journals

27. Which topics would you be most interested in seeing addressed more often or in more depth in the ASHA journals? (*Select all that apply.*)

Analyses limited to respondents who met the following criterion:

❖ CCC-A

Topic	Facility Type		
	All Facility Types **(*n* = 204)**	**Elementary School** **(*n* ≥ 46)**	**Combination** **(*n* ≥ 85)**
Hearing disorders	87.7	87.2	91.8
		Too many cells (25%) have an expected count of less than 5.	
Early identification and intervention	43.9	30.4	41.9
		Statistical significance: $\chi^2(1)$ = 1.7, *p* = .259	
Autism spectrum disorder (ASD)	18.9	17.0	11.8
		Statistical significance: $\chi^2(1)$ = 0.7, *p* = .434	
Telepractice and computer-based approaches	18.3	10.6	21.2
		Statistical significance: $\chi^2(1)$ = 2.3, *p* = .155	
Social communication and pragmatic disorders	15.1	21.3	15.3
		Statistical significance: $\chi^2(1)$ = 0.8, *p* = .473	
Reading and writing (literacy)	14.0	15.2	14.1
		Statistical significance: $\chi^2(1)$ = 0.0, *p* = 1.0	
Cultural and linguistic diversity	12.8	17.4	8.2
		Statistical significance: $\chi^2(1)$ = 2.5, *p* = .151	
Augmentative and alternative communication (AAC)	11.5	4.3	17.4
		Statistical significance: $\chi^2(1)$ = 4.7, ***p* = .032**	
Traumatic brain injury	8.0	4.3	10.5
		Too many cells (25%) have an expected count of less than 5.	
	(Question 27 continues on next page.)		

27. (cont'd) Which topics would you be most interested in seeing addressed more often or in more depth in the ASHA journals? (*Select all that apply.*)
Analyses limited to respondents who met the following criterion:
   ❖   CCC-A

Topic	Facility Type		
	All Facility Types (*n* = 204)	**Elementary School** (*n* ≥ 46)	**Combination** (*n* ≥ 85)
Specific language impairment (SLI)	6.6	6.4	10.5
		Too many cells (25%) have an expected count of less than 5.	
Childhood apraxia of speech (CAS)	3.7	4.3	2.3
		Too many cells (50%) have an expected count of less than 5.	
Fluency disorders	2.2	4.3	0.0
		Too many cells (50%) have an expected count of less than 5.	
Genetic and congenital disorders	1.4	2.1	2.3
		Too many cells (50%) have an expected count of less than 5.	
Voice or resonance disorders	0.9	2.1	0.0
		Too many cells (50%) have an expected count of less than 5.	
Dysphagia (swallowing/feeding)	0.5	0.0	1.2
		Too many cells (50%) have an expected count of less than 5.	
Dysarthria	0.0	0.0	0.0

IDEA

28. Rate the importance of each of the issues below in relation to the Individuals with Disabilities Education Act (IDEA).

Scale: 1 = *Not at all important* → 5 = *Very important*

Analyses limited to respondents who met the following criterion:
  ❖ CCC-A

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
American Sign Language (ASL)			
	n = 167	*n* = 36	*n* = 71
1 – *Not at all important*	6.2	8.3	4.2
2	13.2	13.9	15.5
3	27.1	19.4	29.6
4	17.2	25.0	16.9
5 – *Very important*	36.3	33.3	33.8
		Too many cells (20%) have an expected count of less than 5.	
Connection With the Early Hearing Detection and Intervention Program (EHDI)			
	n = 143	*n* = 33	*n* = 61
1 – *Not at all important*	0.7	0.0	1.6
2	2.6	6.1	0.0
3	11.0	6.1	9.8
4	12.7	18.2	13.1
5 – *Very important*	73.1	69.7	75.4
		Too many cells (60%) have an expected count of less than 5.	
Early Childhood			
	n = 160	*n* = 32	*n* = 67
1 – *Not at all important*	0.0	0.0	0.0
2	0.9	3.1	0.0
3	10.3	9.4	11.9
4	18.7	28.1	14.9
5 – *Very important*	70.0	59.4	73.1
		Too many cells (38%) have an expected count of less than 5.	
Early Intervention			
	n = 168	*n* = 36	*n* = 69
1 – *Not at all important*	0.6	0.0	1.4
2	2.2	2.8	0.0
3	2.8	5.6	2.9
4	15.0	22.2	13.0
5 – *Very important*	79.5	69.4	82.6
		Too many cells (60%) have an expected count of less than 5.	
		(Question 28 continues on next page.)	

28. (cont'd) Rate the importance of each of the issues below in relation to the Individuals with Disabilities Education Act (IDEA).

Scale: 1 = *Not at all important* → 5 = *Very important*

Analyses limited to respondents who met the following criterion:
   ❖ CCC-A

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
Funding			
	n = 159	*n* = 34	*n* = 69
1 – *Not at all important*	1.7	2.9	1.4
2	3.4	8.8	0.0
3	12.5	11.8	10.1
4	16.6	20.6	15.9
5 – *Very important*	65.9	55.9	72.5
		Too many cells (50%) have an expected count of less than 5.	
IEP Team Independence/Strengthening			
	n = 158	*n* = 34	*n* = 66
1 – *Not at all important*	2.7	5.9	1.5
2	7.5	8.8	7.6
3	28.9	23.5	30.3
4	23.4	26.5	25.8
5 – *Very important*	37.5	35.3	34.8
		Too many cells (30%) have an expected count of less than 5.	
Language of Intervention for English Language Learners (ELLs)			
	n = 147	*n* = 32	*n* = 65
1 – *Not at all important*	0.8	0.0	0.0
2	16.6	18.8	13.8
3	29.4	40.6	29.2
4	32.8	25.0	36.9
5 – *Very important*	20.4	15.6	20.0
		Statistical significance: $\chi^2(3) = 2.3$, $p = .508$	
Paperwork Reduction			
	n = 156	*n* = 34	*n* = 68
1 – *Not at all important*	7.0	2.9	7.4
2	17.3	17.6	14.7
3	30.2	29.4	26.5
4	15.7	26.5	16.2
5 – *Very important*	29.9	23.5	35.3
		Too many cells (20%) have an expected count of less than 5.	
		(Question 28 continues on next page.)	

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**

28. (cont'd) Rate the importance of each of the issues below in relation to the Individuals with Disabilities Education Act (IDEA).
Scale: 1 = *Not at all important* → 5 = *Very important*
Analyses limited to respondents who met the following criterion:
  ❖ CCC-A

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
Treatment of ASD			
	n = 151	*n* = 34	*n* = 63
1 – *Not at all important*	6.3	8.8	6.3
2	6.6	11.8	6.3
3	30.6	38.2	31.7
4	28.2	20.6	27.0
5 – *Very important*	28.2	20.6	28.6
		Too many cells (30%) have an expected count of less than 5.	

Note. IEP = Individualized Education Program; ASD = autism spectrum disorder.

Student Loans

29. How much unpaid student debt do you have? *Enter "0" if none.*
Analyses limited to respondents who met the following criteria:
  ❖ CCC-A
  ❖ Student debt of at least $1

Debt	Facility Type		
	All Facility Types **(*n* = 32)**	**Elementary School** **(*n* = 8)**	**Combination** **(*n* = 14)**
25th percentile	$20,000		
50th percentile (**Median**)	$60,819		
75th percentile	$100,000	(*n* < 25)	(*n* < 25)
Mean	$79,042		
Standard deviation	$93,968		
Mode	$100,000		

30. Are you aware of the federal program that offers $17,500 in loan forgiveness for math, science, and special education teachers? (Percentages)
    Analyses limited to respondents who met the following criterion:
    ❖ CCC-A

Response	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
Includes Those With $0 Student Debt			
	n = 100	*n* = 22	*n* = 43
Yes	37.6	18.2	37.2
No (SKIP to Q 33.)	62.4	81.8	62.8
		Statistical significance: $\chi^2(1) = 2.5$, *p* = .159	
Excludes Those With $0 Student Debt			
	n = 32	*n* = 8	*n* = 13
Yes	51.4	(*n* < 25)	(*n* < 25)
No (SKIP to Q 33.)	48.6		

31. If YES, what endorsement, classification, or certification from your state department of education makes you eligible for the program? *Select all that apply.* (Percentages)
    Responses were in alphabetical order on survey instrument.
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Responded *Yes* to Q. 30 (aware of program)

Endorsement	Facility Type		
	All Facility Types (*n* = 38)	**Elementary School (*n* = 4)**	**Combination (*n* = 16)**
Speech-language pathologist	9.9	(*n* < 25)	(*n* < 25)
Special education teacher	11.9		
Special education with a speech-language endorsement	7.8		
Speech-language teacher	4.8		
Audiologist	65.9		
Other, specify:	4.9		

Benefit	Facility Type		
	All Facility Types (*n* = 133)	Elementary School (*n* = 26)	Combination (*n* = 56)
Yes	3.3	0.0	5.4
No	96.7	100.0	94.6
		Too many cells (50%) have an expected count of less than 5.	

32. Have you benefited from the federal program described in Q 30? (Percentages)
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Regardless of current amount of student debt

Demographics

33. Which one of the following best describes where you work? (Percentages)
    Analyses limited to respondents who met the following criteria:
    ❖ CCC-A
    ❖ Employed full time or part time

Area	Facility Type		
	All Facility Types (*n* = 196)	Elementary School (*n* = 44)	Combination (*n* = 82)
City/urban area	44.3	45.5	39.0
Suburban area	36.0	31.8	36.6
Rural area	19.6	22.7	24.4
Not employed (SKIP to Q 35.)			
		Statistical significance: $\chi^2(2) = 0.5$, $p = .776$	

34. In what state is your primary employment FACILITY located? *Use standard post office two-letter code (e.g., ID for Idaho).*

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Employed full time or part time

State	n	State	n	State	n
Alabama (AL)	2	Kentucky (KY)	0	North Dakota (ND)	1
Alaska (AK)	2	Louisiana (LA)	4	Ohio (OH)	8
Arizona (AZ)	4	Maine (ME)	0	Oklahoma (OK)	0
Arkansas (AR)	0	Maryland (MD)	7	Oregon (OR)	2
California (CA)	14	Massachusetts (MA)	4	Pennsylvania (PA)	6
Colorado (CO)	12	Michigan (MI)	7	Rhode Island (RI)	0
Connecticut (CT)	4	Minnesota (MN)	8	South Carolina (SC)	2
Delaware (DE)	0	Mississippi (MS)	3	South Dakota (SD)	1
District of Columbia (DC)	2	Missouri (MO)	4	Tennessee (TN)	4
Florida (FL)	10	Montana (MT)	0	Texas (TX)	11
Georgia (GA)	6	Nebraska (NE)	2	Utah (UT)	4
Hawaii (HI)	0	Nevada (NV)	1	Vermont (VT)	0
Idaho (ID)	2	New Hampshire (NH)	0	Virginia (VA)	4
Illinois (IL)	6	New Jersey (NJ)	3	Washington (WA)	8
Indiana (IN)	2	New Mexico (NM)	4	West Virginia (WV)	2
Iowa (IA)	5	New York (NY)	15	Wisconsin (WI)	6
Kansas (KS)	5	North Carolina (NC)	7	Wyoming (WY)	1
				Total	204

(Question 34 continues on next page.)

34. (cont'd) In what state is your primary employment FACILITY located? *Use standard post office two-letter code (e.g., ID for Idaho).*

Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
- ❖ Employed full time or part time

| Region/Division	Facility Type		
	All Facility Types ($n = 204$)	Elementary School ($n \geq 45$)	Combination ($n \geq 85$)
Northeast	**15.7**	**17.0**	**16.5**
Middle Atlantic	11.5	15.6	12.8
New England	4.3	2.2	3.5
Midwest	**26.7**	**25.5**	**30.6**
East North Central	14.3	6.7	18.6
West North Central	12.4	17.8	11.6
South	**31.8**	**29.8**	**28.2**
East South Central	4.4	4.4	3.5
South Atlantic	19.4	20.0	17.4
West South Central	8.0	4.4	7.0
West	**25.8**	**27.7**	**24.7**
Mountain	13.3	17.8	12.8
Pacific	12.5	11.1	12.8
		Statistical significance: FOR 4 REGIONS: $\chi^2(3) = 0.4$, $p = .940$ FOR 9 DIVISIONS: Too many cells (28%) have an expected count of less than 5.	
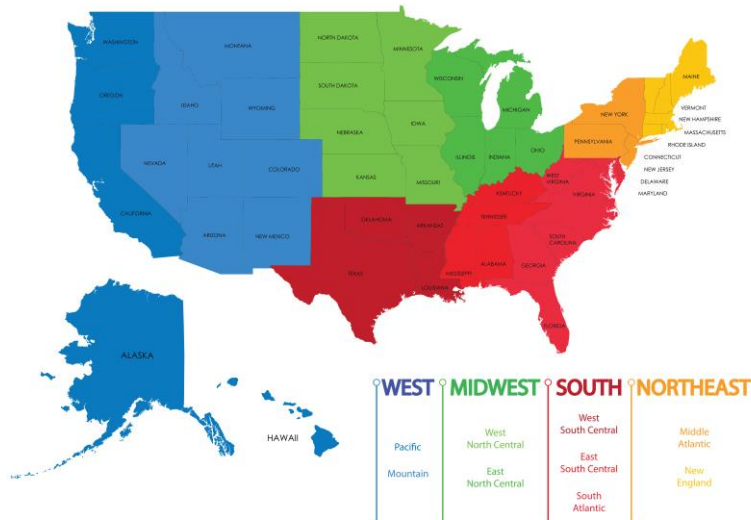
35. Identify the degrees you have earned. *Count only actual degrees—not equivalencies or certificates—and do not include degrees expected but not yet conferred. Select all that apply.* (Percentages)

Analyses limited to respondents who met the following criterion:
   ❖ CCC-A

Degree	Facility Type		
	All Facility Types **(*n* = 204)**	**Elementary School** **(*n* = 47)**	**Combination** **(*n* = 86)**
Master's	68.7	61.7	76.7
AuD	54.0	55.3	51.2
SLPD or CScD	0.0	0.0	0.0
PhD	1.0	0.0	1.2
Other doctorate	0.6	0.0	1.2
Highest Degree			
Master's	44.4	44.7	46.5
Doctorate	55.6	55.3	53.5
		Statistical significance: $\chi^2(1) = 0.0$, *p* = .858	

Note. AuD = doctor of audiology; SLPD = doctor of speech-language pathology; CScD = doctor of communication science; PhD = doctor of philosophy.
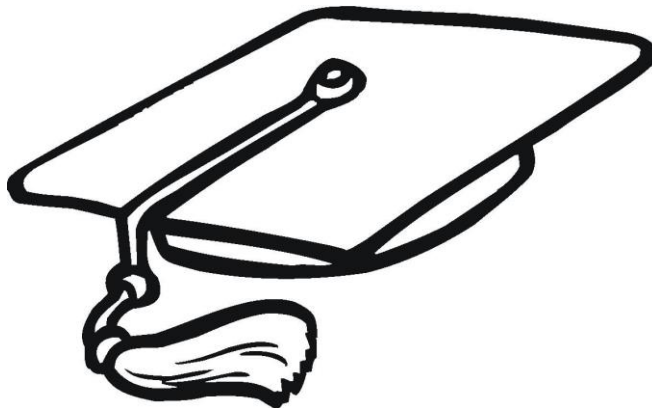
36. How many years (a) have you been employed in the audiology or speech-language pathology profession, and (b) how many of those years were in schools? *Round to the nearest full year. Enter "0" if you have never been employed in the professions.*
     Analyses limited to respondents who met the following criteria:
     ❖ CCC-A
     ❖ Response greater than 0

Years	Facility Type		
	All Facility Types	**Elementary School**	**Combination**
(a) Total Years in the Professions			
	(*n* = 201)	(*n* = 47)	(*n* = 84)
25th percentile	16.0	13.0	17.6
50th percentile (**Median**)	25.0	21.2	25.7
75th percentile	33.0	28.0	33.7
Mean	24.0	20.9	25.0
Standard deviation	10.8	9.1	10.5
Mode	25.0	25.0	33.0
		Statistical significance: $F(1, 128) = 5.0$, ***p* = .027**	
(b) Total Years in the Schools			
	(*n* = 196)	(*n* = 42)	(*n* = 85)
25th percentile	7.0	7.0	7.4
50th percentile (**Median**)	18.1	18.0	17.3
75th percentile	24.5	22.0	24.0
Mean	17.3	15.5	17.2
Standard deviation	10.4	8.9	10.2
Mode	20.0	22.0	4.0
		Statistical significance: $F(1, 124) = 0.8$, $p = .363$	

37. In what year were you born? (*Note: Data were converted to age.*)
   Analyses limited to respondents who met the following criterion:
     ❖ CCC-A

Age	Facility Type		
	All Facility Types (*n* = 202)	**Elementary School** (*n* = 47)	**Combination** (*n* = 84)
25th percentile	43.0	41.0	44.0
50th percentile (**Median**)	52.0	50.5	52.6
75th percentile	58.0	55.0	60.0
Mean	50.7	48.6	51.5
Standard deviation	10.1	9.3	9.8
Mode	58.0	53.0	58.0
		Statistical significance: $F(1, 128) = 2.7$, $p = .104$	

38. Are you…(Percentages) Analyses limited to respondents who met the following criterion: ❖ CCC-A			
Sex	**Facility Type**		
	All Facility Types **(*n* = 204)**	**Elementary School** **(*n* = 47)**	**Combination** **(*n* = 85)**
Female	93.1	95.7	91.8
Male	6.9	4.3	8.2
		Too many cells (25%) have an expected count of less than 5.	
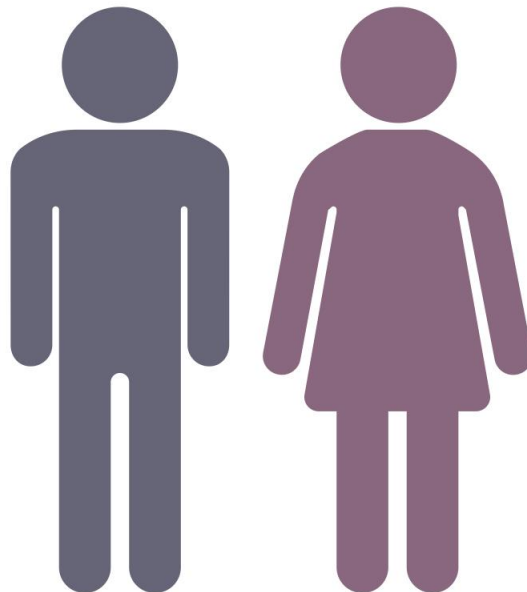
Appendix

Summary Report Statistics

Statistics used in this summary report include the following notations and descriptions:

Notation	Description

Response rate	The percentage of individuals who were included in the sample, minus any who were ineligible
	
	RR $=\dfrac{(C + P)}{S - (Ret + I)}$
	
	Where RR = Response rate
	              C = Number of completed surveys
	              P = Number of partial surveys
	              S = Sample size
	              Ret = Ineligible because of retirement
	              I = Ineligible for other reasons (e.g., does not work in schools, no longer in the field, on leave of absence)
	
	RR $=\dfrac{204}{500 - (0 + 6)}$ $=$ 41.3%

n	The number in the sample. In this report, the number of people who answered a particular question.
Mean	A measure of central tendency; an average. Add the total of all the values and divide by the number of items. Example: (1 + 1 + 7 + 34 + 88) / 5 = 26.2
Standard deviation	A statistic that shows the spread of scores in a distribution. Used with means. The larger the standard deviation, the more widely the scores are spread out around the mean.[1] About 68% of the measurement is between 1 standard deviation greater than and 1 standard deviation smaller than the mean; 95% are plus/minus 2 standard deviations. Example: (1 + 1 + 7 + 34 + 88) Standard deviation = 37.1 Therefore, 68% of the responses are between -10.9 and 63.3
Median	A measure of central tendency. Arrange the values in order, from lowest to highest. Select the value in the middle position. Example: 1, 1, 7, 34, 88 Median = 7
	Appendix table continues on next page.

Notation	Description
Mode	A measure of central tendency; an average. The value that occurs more frequently than any other value. Example: 1, 1, 7, 34, 88 Mode = 1
Statistical significance	Describes whether a value is larger or smaller than would be expected by chance alone. Note that a large sample size can lead to results that are "statistically significant" even though the results themselves may not have substantive or practical significance. This is particularly true for chi-square (χ^2) tests.[1]
Chi-square (χ^2)	A test used to assess the statistical significance of a finding where the variables being assessed are nominal (e.g., annual salary and hourly salary) or ordinal (e.g., excellent, good, fair, and poor). It measures whether there are statistically significant differences between the observed frequencies and the expected frequencies of two variables. The larger the observed frequency is in comparison with the expected frequency, the larger the χ^2 statistic and the more likely the difference is statistically significant. When the sample size is large, large χ^2 values (that is, ones that that are statistically significant) can be obtained even for weak associations.[1]
Cramer's *V*	A measure of the <u>strength</u> of the association, used with χ^2 statistics to identify the meaningfulness of a relationship. The χ^2 value may be large with a small probability ($p < .05$) of having occurred by chance. That is, it is "statistically significant at the .05 level." Cramer's *V* is a measure of how strong (practically important) the relationship is between the variables. The larger the Cramer's *V*, the stronger the association.
ANOVA (*F*)	*F* is the statistic computed when conducting an analysis of variance (ANOVA). *Analysis of variance* measures the differences between means on two or more variables. It is used when independent variables are categorical and a dependent variable is continuous.[1]
p	Probability. Found in expressions such as $p = .003$ meaning "The probability that this result could have been produced by chance is 1 in 3/1000ths. The smaller the number, the less likely that the result was due to chance. The *p* value is the actual probability associated with an obtained statistical result, such as χ^2 or *F*.[1]
df	Degrees of freedom. The number of values that are free to vary when computing a statistic. Used in interpreting both a χ^2 and an *F* ratio. It is calculated in a cross-tabulation as (R − 1) (C − 1) or (the number of rows minus 1) times (the number of columns minus 1). In a 3 × 4 table, *df* would be 6.

[1] Vogt, W. P. (1993). *Dictionary of statistics and methodology*. Newbury Park, CA: Sage.