# NCSC Validity Evaluation

# Teacher Perceptions of Students Participating in AA-AAS: Cross-State Summary

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# Teacher Perceptions of Students Participating in AA-AAS: Cross-State Summary

*A Product of the NCSC Validity Evaluation*

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National Center and State Collaborative

The National Center and State Collaborative (NCSC) is applying the lessons learned from the past decade of research on alternate assessments based on alternate achievement standards (AA-AAS) to develop a multi-state comprehensive assessment system for students with the most significant cognitive disabilities.

NCSC is a collaborative of 28 states (18 core and 10 Tier II states) and five organizations. The NCSC core partner states include: Alaska, Arizona, Connecticut, District of Columbia, Florida, Georgia, Indiana, Louisiana, Nevada, New York, North Dakota, Pacific Assessment Consortium (PAC-6)[2], Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, and Wyoming. As of February 2013, the NCSC Tier II affiliated states include Arkansas, California, Delaware, Idaho, Maine, Maryland, Montana, New Mexico, Oregon, and US Virgin Islands. Tier II states will provide usability and sustainability tests to refine NCSC products before they are released for broad dissemination in 2015, thus ensuring that other states are able to implement them without intensive support from project staff.

The five NCSC partner organizations include: National Center on Educational Outcomes (NCEO) at the University of Minnesota, National Center for the Improvement of Educational Assessment (Center for Assessment), University of North Carolina at Charlotte, University of Kentucky, and edCount, LLC.

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[2] The Pacific Assessment Consortium (including the entities of American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Republic of Palau, and Republic of the Marshall Islands) partner with NCSC as one state, led by the University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (CEDDERS).

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# Executive Summary

If the NCSC GSEG AA-AAS is to be effectively implemented, teachers must instruct students in academic content areas and value inclusion of students in large-scale assessment systems. Ensuring teachers have the professional development to meet this expectation is an important part of the implementation of the NCSC curriculum and assessment system. This report summarizes the findings of a survey developed to collect data from teachers in all 18 core partner NCSC states to evaluate teachers' beliefs and perceptions (a) about students who participate in AA-AAS, (b) appropriate instruction for these students, and (c) their post-school outcome goals.

## Results

Across all NCSC partner states that participated in this survey, 5,285 teachers responded to at least one question. Results addressed four research questions.

**Research Question 1: What is the range of survey respondents' experience teaching students with the most significant cognitive disabilities and administering AA-AAS?**

On average across all NCSC partner states, the number of years teachers had been teaching in their current school was relatively evenly distributed between 1-3 years (23%), 4-6 years (24%), and 10 or more years (26%). The majority of teachers reported working as a teacher of record for 10 or more years (45%) and similarly most respondents in NCSC states indicated that they had been teaching special education for 10 or more years (49%). An additional 15% had been teaching special education for 7-10 years and 16% for 4-6 years. The majority also indicated that they taught in public non-charter schools (89%), in one classroom setting only (81%), or in self-contained special education classrooms (72%). Resource room was the next most common classroom setting reported (18%), followed by inclusive/collaborative general education classroom setting (14%).

Across all NCSC partner states, 29% of respondents indicated that all of their students had access to general education classrooms and teachers, 23% of respondents indicated that some of their students had access to general education classrooms and teachers, and 43% of respondents indicated that none of their students had such access. Nearly one third (32%) of respondents reported that they teach only at the elementary level, 20% teach only at the middle school level, and 23% teach only at the high school level. The number of students for whom respondents administered the AA-AAS in the 2010-2011 school year varied and respondents reported a range of experience administering the AA-AAS across all states, with 39% having administered the AA-AAS for 1-3 years and 29% having administered the assessment for 4-6 years.

**Research Question 2: What is the range of background training among teachers who administer the AA-AAS?**

Most of the survey respondents across all NCSC partner states indicated that they had a master's degree or higher (68%), with an additional 19% having a bachelor's degree plus additional credits. Eight percent of teachers across all states indicated that they had only a bachelor's degree. Across all NCSC partner states, 76% of respondents reported that they held a degree in special education while only 26% of respondents indicated that they had a degree concentrated in an academic content area.

**Research Question 3: To what extent do teachers who administer the AA-AAS believe that academic content is an important focus area in their students' instruction?**

Less than one-third of the total respondents (28%) estimated that *all* or *most* of their peers would agree with the statement, "It is important that students with significant cognitive disabilities have access to the same ideas and content that their same-age, typical peers are learning," although 53% responded that at least half of their peers would agree. Nearly two-thirds of the total respondents (64%) estimated that all or most of their peers would agree with the statement, "Students with the most significant cognitive disabilities should master functional skills, or daily life skills, before beginning to learn academics like reading and mathematics," and 81% responded that at least half of their peers would agree. Respondents across all states were relatively divided about how their peers might react to the statement, "Students with the most significant disabilities can effectively learn functional skills, or daily life skills, when embedded in academic instruction aligned to the grade-level curriculum"; 14% of all respondents estimated that all or most of their peers would agree with this statement, while 43% of all respondents estimated that 0-25% of their peers would agree, and 24% estimated that half of their peers would agree. Nearly two-thirds of all respondents (64%) estimated that most or all of their peers would agree with the statement, "It is important for students with mild/moderate disabilities to learn reading, mathematics, and science" while 34% estimated that all of their peers would agree with this statement. Only 11% of all respondents estimated that all or most of their peers would agree with the statement "It is important for students with severe/profound disabilities to learn reading, mathematics, and science." Nearly two-thirds of all respondents (66%) estimated that only some or none of their peers would agree with this statement, and over a quarter (28%) estimated that 0% of their peers would agree.

**Research Question 4: To what extent do teachers who administer the AA-AAS set challenging, attainable goals for their students?**

Section 4 of the survey asked about teachers' ideas of meaningful and appropriate post-school outcomes for students with the most significant cognitive disabilities. Across each grade span, the top ranked post-school outcome goal was the goal that students are able to express ideas, choices, preferences, and needs. For teachers in elementary school grades, the mean was slightly higher (mean value of 18.2) than for teachers in middle and high school (mean value of 16.1 for both grade spans).

## Implications for Consideration

Results from the survey will be used to guide professional development and consideration will be given to the findings when developing instructional resources designed for teacher use. The implications address three areas for consideration: 1) teacher experience and inclusive practices, 2) professional development, and 3) post-school outcomes.

# Teacher Perceptions of Students Participating in AA-AAS: Cross State Summary

## Introduction

The field of special education has witnessed a shift during the past two decades from an emphasis on teaching students with the most significant cognitive disabilities primarily functional and behavioral skills to an emphasis on instruction in the kinds of academic content that their typical peers learn. The Individuals with Disabilities Education Act of 1997 (IDEA) created a national mandate for alternate assessments as a mechanism for including students who could not participate in regular state and district assessments, even with accommodations or modifications, in large-scale educational assessment systems. The No Child Left Behind Act of 2001 (NCLB) reinforced the requirement that states develop alternate assessments for students with the most significant cognitive disabilities, and align these assessments with academic content standards judged against alternate achievement standards designed for those students. This was meant to incentivize teachers of students with the most significant cognitive disabilities to begin teaching academic content, such as reading and math, even if they had not done so previously in their classrooms. In the meantime, a growing body of research demonstrated that students with the most significant cognitive disabilities can learn academics (Browder & Spooner, 2006; Jimenez, Browder, Spooner, & DiBiase, 2012) and benefit from instruction in both functional and academic skills (Hughes & Carter, 2008; Kleinert, Browder, & Towles-Reeves, 2009; Spooner & Browder, 2006).

This curricular shift has not always been easy for teachers whose preparation courses may not have included strategies for teaching academic content (Thompson, Lazarus, & Thurlow, 2003) or who may believe strongly that academics are not meaningful or appropriate for these students. Previous studies have found that teachers of students with the most significant cognitive disabilities generally support students' access to the general curriculum (Dymond, Renzaglia, Gilson, & Slagor, 2007), but they may value the social and behavioral benefits of inclusion over students' access to academic content (Carter & Hughes, 2006).

If the NCSC GSEG AA-AAS is to be effectively implemented, teachers must instruct students in academic content areas and value inclusion of students in large-scale assessment systems. The NCSC GSEG Theory of Action includes a claim that "teachers have the knowledge and orientation necessary to access the standards and provide academic instruction" as part of the instructional context necessary for making inferences about AA-AAS results. Ensuring these teachers have the professional development to meet this expectation is an important part of the implementation of the NCSC curriculum and assessment system. This study collected survey data from teachers in all 18 core partner NCSC states to evaluate teachers' beliefs and

perceptions (a) about students who participate in AA-AAS, (b) appropriate instruction for these students, and (c) their post-school outcome goals.

## Research Questions

Survey research methodology was used to gather data for the following four research questions:

1. What is the range of survey respondents' experience teaching students with the most significant cognitive disabilities and administering AA-AAS (e.g., length of teaching experience, where the teachers teach, grade levels served, experience with administration of AA-AAS)?

2. What is the range of background training among teachers who administer the AA-AAS (e.g., extent of formal training for serving students taking AA-AAS, extent of formal training in teaching academic content to students taking AA-AAS)?

3. To what extent do teachers who administer the AA-AAS believe that academic content is an important focus area in their students' instruction (e.g., prioritization of academic knowledge/skills and academic instructional goals for students taking AA-AAS)?

4. To what extent do teachers who administer the AA-AAS set challenging, attainable goals for their students (e.g., characterization of life goals and skills for students taking AA-AAS, prioritization of academic knowledge/skills and life goals)?

## Literature Foundation

As a part of the National Center and State Collaborative (NCSC) General Supervision Enhancement Grant, researchers created a teacher survey to gather information on: a) teaching experience, school and classroom setting, and experience with the AA-AAS, b) teachers' assumptions about the characteristics of students who participate in AA-AAS, c) instructional goals and beliefs and attitudes about what students with the most significant cognitive disabilities should be learning, and d) teachers' ideas of meaningful and appropriate post-school outcomes for students with the most significant cognitive disabilities.

Research shows that AA-AAS should provide data on student performance. Towles-Reeves, Garrett, Burdette, and Burdge (2006) found that alternate assessments influenced the development of students' IEPs, but the influence of alternate assessments on IEP development was significantly less than the influence of assessment on daily instruction. This highlights the need to train IEP teams in developing standards-based IEPs that are linked to grade-level content standards (Towles-Reeves, Kleinert, & Muhomba, 2009). Only then can teachers really individualize standards-based instruction for students with the most significant cognitive disabilities (Towles-Reeves et al., 2009). Research suggests that when teachers

incorporate assessment into their daily instruction, scores on alternate assessments improve (Destefano, Shriner, & Lloyd, 2001).

Research further suggests that the assessment scores of students whose teachers were trained in data-based decision making and were incorporating assessment results into their planning for instruction, improved in comparison to the scores of students whose teachers were not trained (Browder et al., 2005). Additionally, these trained teachers made greater progress on IEP objectives (Browder et al., 2005). Research suggests that these trained teachers were targeting the specific skills to be assessed in their daily teaching (Browder et al., 2005). Teachers who provided direct instruction on targeted skills, collected data daily, and enabled their students to self-evaluate their progress, had students scoring higher on alternate assessment than the students of teachers who did not provide this focused instruction (Karvonen, Flowers, Browder, Wakeman, & Algozzine, 2006). Teachers need more training and support in order to be equipped to use assessment to drive instruction (Karvonen et al., 2006). Students with the most significant cognitive disabilities need instruction that is linked to grade-level standards if they are being assessed on standards linked to grade-level content (Towles-Reeves et al., 2009).

Concurrently, the beliefs of school administrators can impact the resources and professional development priorities for teachers. One study of principals suggested that principals overwhelmingly thought that it is more important for students with the most significant cognitive disabilities to learn functional skills than academic content; however, the same study revealed principals agreed that students effectively learn functional skills when they are embedded in the academic, grade-level curriculum (Towles-Reeves et al., 2006). Principals in this same study agreed that the alternate assessment positively influences instruction by increasing accountability, collaboration between general and special education teachers, and expectations for students (Towles-Reeves et al., 2006).

In addition to reviewing the literature in the area of alternate assessment, researchers consulted previously administered surveys that appeared both in the peer reviewed literature and others that had been used by researchers for evaluation purposes in developing validity arguments for AA-AAS (Karvonen, Wakeman, Browder, Rogers, & Flowers, 2011; Kearns & Towles-Reeves, 2006; Towles-Reeves, Schlicher, Forte, Rivera, Hernandez, 2011; Towles-Reeves, Taub, & Forte, 2010). Together, researchers used the literature reviews, results from previous surveys and studies, and instrumentation previously designed to elicit responses from teachers about their instruction and assessment of students with the most significant cognitive disabilities to develop the survey used in the current study.


## Instrumentation and Methodology

edCount designed a survey to elicit information from teachers who are currently administering alternate assessments for their students. edCount crafted questions to

elicit the beliefs of teachers about the learning priorities for students with the most significant cognitive disabilities.

Researchers organized the survey into four sections (see Appendix A). Researchers designed each section to gather data to address each of the four primary research questions. The first section included background questions on teaching experience, school and classroom setting, and experience with the AA-AAS. The second section elicited teachers' assumptions about the characteristics of students who participate in AA-AAS. Section three included questions about instructional goals, and beliefs and attitudes about what students with the most significant cognitive disabilities should be learning. The fourth section addressed teachers' ideas of meaningful and appropriate post-school outcomes for students with the most significant cognitive disabilities.

When the survey was finalized, researchers piloted the survey with five special education teachers who taught students participating in AA-AAS. The teachers provided feedback on the utility of the questions, construction of the questions, user-friendliness of the survey, and content of the questions in relation to teaching and assessing students with the most significant cognitive disabilities. Researchers used the feedback to revise the survey for clarity and utility in answering the research questions.

**Recruitment and Participation**

During the winter of the 2010-2011 school year, state staff in NCSC core partner states sent a survey recruitment notice to teachers who administered the AA-AAS during the current school year (see Appendix B). State staff also directly notified teacher trainers, directors of special education, test coordinators, and principals about the survey and asked them to send along the recruitment notice via email to all teachers administering the AA-AAS in the current school year. Five states sent the recruitment notice directly to teachers of students taking the AA-AAS whereas 10 states sent the recruitment notice to other intermediaries who forwarded the notice along to teachers. In these states, teachers completed the survey housed in Survey Monkey via a link to the survey included in the recruitment notice. One state sent the recruitment notice to teachers without a link to the survey, but included a paper/pencil version of the survey for completion. No incentives were offered for participation in the study. The first survey was opened in Survey Monkey on March 25, 2011 and the last survey was closed on October 31, 2011. The paper and pencil surveys were gathered via the state and data were entered and then sent to researchers in excel format.

**Response Rate**

To qualify for participation in the study, teachers had to have previously administered the AA-AAS to a student at least once. Respondents were not required to answer each question before moving to the next question, and the survey collected no information that could be used to associate teacher or student names with survey responses. Given the manner in which the surveys were disseminated (via multiple avenues for dissemination to reach the widest array of teachers as possible), researchers could not calculate response rates for the states.

## Results

Across all NCSC partner states that participated in this survey, 5,285 teachers responded to at least one question. The total number of respondents by state is included in Exhibit 1. As noted in the methodology section, the exact number of teachers receiving the survey could not be tracked or calculated due to the method used to distribute the surveys (e.g., dissemination of the survey through district coordinators, teacher trainer groups, or listservs with the expectation the surveys would be forwarded to teachers of students with the most significant cognitive disabilities). Therefore, no response rate is provided. The results of this study may not accurately represent the population of teachers who administer AA-AAS within each state and readers are cautioned in generalizing results.

**Exhibit 1. Number of Respondents by State**

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Number of Respondents** | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

**Research Question 1: What is the range of survey respondents' experience teaching students with the most significant cognitive disabilities and administering AA-AAS?**

On average across all NCSC partner states, the number of years teachers have been teaching in their current school is relatively evenly distributed between 1-3 years (23%; see Exhibit 2), 4-6 years (24%), and 10 or more years (26%). Compared to the other NCSC states' percentages of teachers that have been teaching in their current school for 10 or more years, State 10 reported a relatively low percentage (10%), and State 9 and State 17 reported relatively high percentages (41% and 41%, respectively).

**Exhibit 2. Number and Percentage of Years in Current School**

| Years in Current School | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Less than 1 Year | n | 24 | 58 | 6 | 6 | 8 | 119 | 9 | 16 | 6 | 8 | 35 | 6 | 10 | 4 | 10 | 18 | 2 | 345 |
| | % | 14 | 13 | 3 | 15 | 3 | 8 | 4 | 6 | 9 | 7 | 3 | 3 | 12 | 8 | 6 | 14 | 5 | 7 |
| 1-3 Years | n | 42 | 122 | 27 | 12 | 44 | 408 | 53 | 85 | 14 | 37 | 220 | 53 | 19 | 17 | 28 | 26 | 7 | 1,214 |
| | % | 25 | 27 | 14 | 31 | 16 | 28 | 22 | 31 | 21 | 32 | 17 | 22 | 22 | 33 | 16 | 20 | 19 | 23 |
| 4-6 Years | n | 44 | 96 | 40 | 5 | 65 | 382 | 52 | 63 | 6 | 33 | 315 | 49 | 22 | 12 | 27 | 35 | 7 | 1,253 |
| | % | 26 | 21 | 21 | 13 | 24 | 26 | 22 | 23 | 9 | 29 | 24 | 21 | 26 | 23 | 16 | 27 | 19 | 24 |
| 7-10 Years | n | 24 | 53 | 40 | 8 | 47 | 198 | 25 | 38 | 11 | 21 | 221 | 39 | 14 | 6 | 29 | 17 | 5 | 796 |
| | % | 14 | 12 | 21 | 21 | 18 | 14 | 11 | 14 | 16 | 18 | 17 | 16 | 16 | 12 | 17 | 13 | 14 | 15 |
| 10+ years | n | 24 | 71 | 67 | 5 | 88 | 294 | 76 | 55 | 28 | 12 | 454 | 65 | 20 | 10 | 63 | 25 | 15 | 1,372 |
| | % | 14 | 16 | 36 | 13 | 33 | 20 | 32 | 20 | 41 | 10 | 35 | 27 | 23 | 19 | 37 | 19 | 41 | 26 |
| Not Specified | n | 13 | 48 | 7 | 3 | 16 | 57 | 22 | 21 | 3 | 4 | 57 | 27 | 1 | 3 | 14 | 8 | 1 | 305 |
| | % | 8 | 11 | 4 | 8 | 6 | 4 | 9 | 8 | 4 | 3 | 4 | 11 | 1 | 6 | 8 | 6 | 3 | 6 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

On average across all NCSC partner states, the largest percentage of teachers reported working as a teacher of record for 10 or more years (45%; see Exhibit 3), ranging from 21% of teachers in State 4 to 68% of teachers in State 17. In all year ranges, the total percentages of all respondents across states are very similar, except 10 or more years where there is a substantially higher representation.

**Exhibit 3. Number and Percentage of Years of Experience as Teacher of Record**

| Years of Experience | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Less than 1 Year | n | 10 | 33 | 7 | 3 | 6 | 49 | 2 | 10 | 8 | 3 | 22 | 6 | 5 | 0 | 11 | 5 | 1 | 181 |
| | % | 6 | 7 | 4 | 8 | 2 | 3 | 1 | 4 | 12 | 3 | 2 | 3 | 6 | 0 | 6 | 4 | 3 | 3 |
| 1-3 Years | n | 22 | 60 | 8 | 8 | 26 | 210 | 20 | 31 | 9 | 16 | 128 | 28 | 14 | 6 | 16 | 20 | 3 | 625 |
| | % | 13 | 13 | 4 | 21 | 10 | 14 | 8 | 11 | 13 | 14 | 10 | 12 | 16 | 12 | 9 | 16 | 8 | 12 |
| 4-6 Years | n | 23 | 75 | 17 | 9 | 30 | 234 | 40 | 36 | 6 | 22 | 239 | 36 | 15 | 12 | 18 | 31 | 4 | 847 |
| | % | 13 | 17 | 9 | 23 | 11 | 16 | 17 | 13 | 9 | 19 | 18 | 15 | 17 | 23 | 11 | 24 | 11 | 16 |
| 7-10 Years | n | 22 | 57 | 27 | 4 | 33 | 215 | 22 | 38 | 6 | 24 | 209 | 32 | 14 | 6 | 28 | 12 | 3 | 752 |
| | % | 13 | 13 | 14 | 10 | 12 | 15 | 9 | 14 | 9 | 21 | 16 | 13 | 16 | 12 | 16 | 9 | 8 | 14 |
| 10+ years | n | 77 | 157 | 97 | 8 | 144 | 651 | 127 | 119 | 30 | 43 | 597 | 105 | 36 | 23 | 75 | 50 | 25 | 2,364 |
| | % | 45 | 35 | 52 | 21 | 54 | 45 | 54 | 43 | 44 | 37 | 46 | 44 | 42 | 44 | 44 | 39 | 68 | 45 |
| Not Specified | n | 17 | 66 | 31 | 7 | 29 | 99 | 26 | 44 | 9 | 7 | 107 | 32 | 2 | 5 | 23 | 11 | 1 | 516 |
| | % | 10 | 15 | 17 | 18 | 11 | 7 | 11 | 16 | 13 | 6 | 8 | 13 | 2 | 10 | 13 | 9 | 3 | 10 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

*Note. The teacher of record is the teacher (or teachers, for example in co-teaching assignments) who is responsible for direct instruction of core academic content and has been assigned responsibility for a student's learning in a subject or course with aligned performance measures.*

The most respondents in NCSC states indicated that they have been teaching special education for 10 or more years (49%; see Exhibit 4). An additional 15% have been teaching special education for 7-10 years and 16% for 4-6 years. Only 2% reported less than one year of experience teaching special education. Compared to other NCSC states, State 3 and State 17 reported relatively high percentages of teachers with 10 or more years of experience in special education (64% and 76%, respectively) and State 4 reported a relatively low percentage of teachers with 10 or more years of experience (31%).

**Exhibit 4. Number and Percentage of Years of Experience in Special Education**

| Years of Experience | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Less than 1 Year | n | 4 | 17 | 1 | 2 | 3 | 37 | 2 | 9 | 0 | 1 | 12 | 3 | 2 | 0 | 7 | 5 | 1 | 106 |
| | % | 2 | 4 | 1 | 5 | 1 | 3 | 1 | 3 | 0 | 1 | 1 | 1 | 2 | 0 | 4 | 4 | 3 | 2 |
| 1-3 Years | n | 29 | 51 | 6 | 5 | 20 | 194 | 18 | 42 | 9 | 13 | 114 | 23 | 11 | 6 | 12 | 18 | 1 | 572 |
| | % | 17 | 11 | 3 | 13 | 7 | 13 | 8 | 15 | 13 | 11 | 9 | 10 | 13 | 12 | 7 | 14 | 3 | 11 |
| 4-6 Years | n | 21 | 81 | 15 | 7 | 35 | 248 | 39 | 39 | 9 | 21 | 227 | 41 | 12 | 11 | 16 | 31 | 4 | 857 |
| | % | 12 | 18 | 8 | 18 | 13 | 17 | 16 | 14 | 13 | 18 | 17 | 17 | 14 | 21 | 9 | 24 | 11 | 16 |
| 7-10 Years | n | 21 | 67 | 30 | 8 | 42 | 227 | 25 | 38 | 10 | 25 | 215 | 28 | 15 | 7 | 26 | 15 | 3 | 802 |
| | % | 12 | 15 | 16 | 21 | 16 | 16 | 11 | 14 | 15 | 22 | 17 | 12 | 17 | 13 | 15 | 12 | 8 | 15 |
| 10+ years | n | 80 | 191 | 119 | 12 | 149 | 684 | 131 | 117 | 36 | 49 | 658 | 116 | 45 | 25 | 95 | 54 | 28 | 2,589 |
| | % | 47 | 43 | 64 | 31 | 56 | 47 | 55 | 42 | 53 | 43 | 51 | 49 | 52 | 48 | 56 | 42 | 76 | 49 |
| Not Specified | n | 16 | 41 | 16 | 5 | 19 | 68 | 22 | 33 | 4 | 6 | 76 | 28 | 1 | 3 | 15 | 6 | 0 | 359 |
| | % | 9 | 9 | 9 | 13 | 7 | 5 | 9 | 12 | 6 | 5 | 6 | 12 | 1 | 6 | 9 | 5 | 0 | 7 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

The majority of respondents in NCSC states indicated that they teach in public non-charter schools (89%; see Exhibit 5), ranging from 62% of teachers in State 4 to 100% of teachers in State 17. Compared to other NCSC states, State 4 reported a relatively high percentage of teachers who work in non-public schools (26%).

**Exhibit 5. Number and Percentage of Teachers by School Setting**

| School Setting | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Public Non-Charter School** | n | 164 | 375 | 163 | 24 | 258 | 1,379 | 217 | 243 | 62 | 111 | 1,093 | 195 | 78 | 50 | 149 | 124 | 37 | 4,722 |
| | % | 96 | 84 | 87 | 62 | 96 | 95 | 92 | 87 | 91 | 97 | 84 | 82 | 91 | 96 | 87 | 96 | 100 | 89 |
| **Charter School** | n | 0 | 32 | 0 | 2 | 1 | 33 | 1 | 14 | 0 | 0 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 99 |
| | % | 0 | 7 | 0 | 5 | 0 | 2 | 0 | 5 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 2 |
| **Non-Public School** | n | 0 | 11 | 17 | 10 | 0 | 6 | 0 | 3 | 0 | 0 | 154 | 13 | 8 | 0 | 9 | 0 | 0 | 231 |
| | % | 0 | 2 | 9 | 26 | 0 | 0 | 0 | 1 | 0 | 0 | 12 | 5 | 9 | 0 | 5 | 0 | 0 | 4 |
| **Not Specified** | n | 7 | 30 | 7 | 3 | 9 | 40 | 19 | 18 | 6 | 4 | 46 | 24 | 0 | 2 | 13 | 5 | 0 | 233 |
| | % | 4 | 7 | 4 | 8 | 3 | 3 | 8 | 6 | 9 | 3 | 4 | 10 | 0 | 4 | 8 | 4 | 0 | 4 |
| **Total** | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Across all NCSC states, the majority of respondents reported teaching in one classroom setting only (81%; see Exhibit 6), ranging from 49% of teachers in State 3 to 91% of teachers in State 10. Overall, an additional 11% of respondents indicated teaching in two classroom settings. Compared to other NCSC states, State 3 and State 9 reported a relatively high percentage of teachers that teach in two settings (35% and 34%, respectively) and State 3 also reported a relatively high percentage of teachers that teach in three settings (12%).

**Exhibit 6. Number of Classroom Settings in which Teachers Teach**

| Number of Classroom Settings | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| One Setting Only | n | 123 | 345 | 91 | 29 | 224 | 1,264 | 152 | 212 | 39 | 105 | 1,141 | 164 | 73 | 46 | 114 | 107 | 30 | 4,259 |
| | % | 72 | 77 | 49 | 74 | 84 | 87 | 64 | 76 | 57 | 91 | 88 | 69 | 85 | 88 | 67 | 83 | 81 | 81 |
| Two Settings | n | 17 | 56 | 66 | 4 | 27 | 134 | 43 | 40 | 23 | 4 | 94 | 34 | 9 | 4 | 34 | 11 | 6 | 606 |
| | % | 10 | 13 | 35 | 10 | 10 | 9 | 18 | 14 | 34 | 3 | 7 | 14 | 10 | 8 | 20 | 9 | 16 | 11 |
| Three Settings | n | 13 | 14 | 22 | 3 | 1 | 19 | 20 | 8 | 3 | 2 | 21 | 14 | 3 | 0 | 9 | 4 | 1 | 157 |
| | % | 8 | 3 | 12 | 8 | 0 | 1 | 8 | 3 | 4 | 2 | 2 | 6 | 3 | 0 | 5 | 3 | 3 | 3 |
| Four Settings | n | 4 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 10 |
| | % | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| No Response | n | 14 | 33 | 8 | 3 | 14 | 40 | 22 | 18 | 3 | 4 | 46 | 24 | 1 | 2 | 14 | 7 | 0 | 253 |
| | % | 8 | 7 | 4 | 8 | 5 | 3 | 9 | 6 | 4 | 3 | 4 | 10 | 1 | 4 | 8 | 5 | 0 | 5 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Among all teachers across all NCSC states, the most common classroom setting reported was the self-contained special education classrooms (72%; see Exhibit 7). Resource room was the next most common classroom setting reported (18%), followed by inclusive/collaborative general education classroom setting (14%). Compared to other NCSC partner states, State 3, State 7, and State 12 reported relatively high percentages of teachers in the inclusive/collaborative general education classroom setting (45%, 32%, and 27%, respectively), and State 3 and State 15 reported relatively high percentages of teachers in resource rooms (50% and 66%, respectively).

**Exhibit 7. Number and Percentage of Teachers by Classroom Setting**

| Type of Classroom Setting | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inclusive/ Collaborative General Education | n | 32 | 95 | 85 | 8 | 31 | 116 | 75 | 54 | 17 | 4 | 112 | 64 | 13 | 1 | 25 | 17 | 3 | 752 |
| | % | 19 | 21 | 45 | 21 | 12 | 8 | 32 | 19 | 25 | 3 | 9 | 27 | 15 | 2 | 15 | 13 | 8 | 14 |
| Resource Room | n | 66 | 110 | 93 | 9 | 22 | 168 | 85 | 59 | 59 | 12 | 70 | 58 | 11 | 0 | 113 | 22 | 15 | 972 |
| | % | 39 | 25 | 50 | 23 | 8 | 12 | 36 | 21 | 87 | 10 | 5 | 24 | 13 | 0 | 66 | 17 | 41 | 18 |
| Self-Contained Special Education | n | 102 | 283 | 97 | 23 | 192 | 1,248 | 136 | 197 | 18 | 94 | 993 | 144 | 68 | 48 | 61 | 100 | 26 | 3,830 |
| | % | 60 | 63 | 52 | 59 | 72 | 86 | 57 | 71 | 26 | 82 | 76 | 60 | 79 | 92 | 35 | 78 | 70 | 72 |
| Separate School | n | 12 | 11 | 14 | 6 | 44 | 61 | 2 | 6 | 0 | 9 | 217 | 20 | 8 | 5 | 10 | 2 | 1 | 428 |
| | % | 7 | 2 | 7 | 15 | 16 | 4 | 1 | 2 | 0 | 8 | 17 | 8 | 9 | 10 | 6 | 2 | 3 | 8 |
| No Response | n | 14 | 33 | 8 | 3 | 14 | 40 | 22 | 18 | 3 | 4 | 46 | 24 | 1 | 2 | 14 | 7 | 0 | 253 |
| | % | 8 | 7 | 4 | 8 | 5 | 3 | 9 | 6 | 4 | 3 | 4 | 10 | 1 | 4 | 8 | 5 | 0 | 5 |
| Total | n | 226 | 532 | 297 | 49 | 303 | 1,633 | 320 | 334 | 97 | 123 | 1,438 | 310 | 101 | 56 | 223 | 148 | 45 | 6,235 |

*Note. Because some teachers teach in more than one classroom setting, the totals in this table exceed 100%.*

Across all NCSC partner states, 29% of respondents indicated that all of their students have access to general education classrooms and teachers, 23% of respondents indicated that some of their students have access to general education classrooms and teachers, and 43% of respondents indicated that none of their students have such access (see Exhibit 8). Compared to other NCSC states, relatively low percentages of respondents from State 3, State 9, and State 15 indicated that none of their students have access to general education classrooms and teachers (21%, 10%, and 16%, respectively), and relatively high percentages of respondents from State 5 and State 14 indicated that none of their students have any such access (62% and 69%, respectively).

**Exhibit 8. Number and Percentage of Students with Access to General Education Classrooms and Teachers**

| Access to General Education | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Students | n | 57 | 132 | 104 | 12 | 41 | 355 | 74 | 111 | 45 | 28 | 302 | 77 | 30 | 6 | 93 | 46 | 14 | 1,527 |
| | % | 33 | 29 | 56 | 31 | 15 | 24 | 31 | 40 | 66 | 24 | 23 | 32 | 35 | 12 | 54 | 36 | 38 | 29 |
| Some Students | n | 47 | 108 | 36 | 4 | 48 | 328 | 80 | 81 | 14 | 44 | 251 | 64 | 16 | 8 | 37 | 37 | 11 | 1,214 |
| | % | 27 | 24 | 19 | 10 | 18 | 22 | 34 | 29 | 21 | 38 | 19 | 27 | 19 | 15 | 22 | 29 | 30 | 23 |
| No Students | n | 52 | 167 | 40 | 20 | 166 | 722 | 59 | 68 | 7 | 37 | 693 | 72 | 37 | 36 | 27 | 39 | 12 | 2,254 |
| | % | 30 | 37 | 21 | 51 | 62 | 50 | 25 | 24 | 10 | 32 | 53 | 30 | 43 | 69 | 16 | 30 | 32 | 43 |
| No Response | n | 15 | 41 | 7 | 3 | 13 | 53 | 24 | 18 | 2 | 6 | 56 | 26 | 3 | 2 | 14 | 7 | 0 | 290 |
| | % | 9 | 9 | 4 | 8 | 5 | 4 | 10 | 6 | 3 | 5 | 4 | 11 | 3 | 4 | 8 | 5 | 0 | 5 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

A cross tabulation analysis of classroom setting and access to general education classrooms and teachers across all NCSC partner states showed that the majority of teachers who work in inclusive/collaborative general education classrooms and in resource rooms reported that all of their students have access to general education classrooms and teachers (63% and 61%, respectively, see Exhibit 9). About half (49%) of teachers who work in self-contained special education classrooms indicated that none of their students have access to general education classrooms and teachers; the other half were relatively evenly divided, with 23% of teachers indicating that all of their students have such access and 27% of teachers reporting that some of their students have access to general education classrooms and teachers. Over 84% of teachers who work in separate schools reported that none of their students have any such access. Interestingly, though, 12% of respondents teaching in inclusive/collaborative classrooms noted their students had no access to general education classrooms.

**Exhibit 9. Number and Percentage of Students in All States with Access to General Education Classrooms and Teachers, by Classroom Setting**

| Access to General Education | Inclusive/ Collaborative Teachers | | Resource Room Teachers | | Self-Contained Special Education Classroom Teachers | | Separate School Teachers | |
|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % |
| **All students have access** | 469 | 63 | 586 | 61 | 881 | 23 | 33 | 8 |
| **Some students have access** | 184 | 25 | 234 | 24 | 1,038 | 27 | 34 | 8 |
| **No students have access** | 88 | 12 | 136 | 14 | 1,874 | 49 | 353 | 84 |
| **Total** | 741 | 100 | 956 | 100 | 3,793 | 100 | 420 | 100 |

Across all NCSC partner states, nearly one third (32%; see Exhibit 10) of respondents reported that they teach only at the elementary level (kindergarten-grade 5), 20% reported that they teach only at the middle school level (grades 6-8), and 23% reported that they teach only at the high school level (grades 9-12).

**Exhibit 10. Number and Percentage of Teachers by Grade Levels in which They Teach**

| Grades Taught | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Elementary | n | 54 | 110 | 47 | 9 | 78 | 551 | 74 | 78 | 13 | 40 | 421 | 71 | 30 | 14 | 55 | 52 | 7 | 1,704 |
| School | % | 32 | 25 | 25 | 23 | 29 | 38 | 31 | 28 | 19 | 35 | 32 | 30 | 35 | 27 | 32 | 40 | 19 | 32 |
| Elementary/Middle | n | 16 | 94 | 13 | 7 | 14 | 55 | 38 | 32 | 10 | 16 | 185 | 34 | 12 | 6 | 24 | 6 | 11 | 573 |
| School | % | 9 | 21 | 7 | 18 | 5 | 4 | 16 | 12 | 15 | 14 | 14 | 14 | 14 | 12 | 14 | 5 | 30 | 11 |
| Elementary/High | n | 2 | 0 | 1 | 0 | 2 | 6 | 1 | 1 | 2 | 0 | 4 | 1 | 1 | 0 | 0 | 2 | 0 | 23 |
| School | % | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 |
| Middle School | n | 21 | 56 | 34 | 11 | 49 | 373 | 30 | 51 | 7 | 25 | 268 | 30 | 17 | 12 | 26 | 21 | 5 | 1,036 |
| | % | 12 | 13 | 18 | 28 | 18 | 26 | 13 | 18 | 10 | 22 | 21 | 13 | 20 | 23 | 15 | 16 | 14 | 20 |
| Middle/High | n | 8 | 9 | 13 | 4 | 25 | 46 | 7 | 21 | 12 | 1 | 75 | 28 | 2 | 4 | 20 | 1 | 4 | 280 |
| School | % | 5 | 2 | 7 | 10 | 9 | 3 | 3 | 8 | 18 | 1 | 6 | 12 | 2 | 8 | 12 | 1 | 11 | 5 |
| High School | n | 30 | 131 | 67 | 1 | 81 | 370 | 51 | 75 | 8 | 27 | 266 | 38 | 19 | 13 | 18 | 38 | 5 | 1,238 |
| | % | 18 | 29 | 36 | 3 | 30 | 25 | 22 | 27 | 12 | 23 | 20 | 16 | 22 | 25 | 11 | 29 | 14 | 23 |
| All | n | 26 | 10 | 4 | 3 | 5 | 17 | 7 | 2 | 13 | 2 | 27 | 12 | 4 | 1 | 14 | 3 | 5 | 155 |
| | % | 15 | 2 | 2 | 8 | 2 | 1 | 3 | 1 | 19 | 2 | 2 | 5 | 5 | 2 | 8 | 2 | 14 | 3 |
| Not Specified | n | 14 | 38 | 8 | 4 | 14 | 40 | 29 | 18 | 3 | 4 | 56 | 25 | 1 | 2 | 14 | 6 | 0 | 276 |
| | % | 8 | 8 | 4 | 10 | 5 | 3 | 12 | 6 | 4 | 3 | 4 | 10 | 1 | 4 | 8 | 5 | 0 | 5 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

*Note. The school levels represent the following grades: elementary school = kindergarten-grade 5, middle school = grades 6-8, and high school = grades 9-12.*

The number of students for whom respondents administered the AA-AAS in the 2010-2011 school year varied. Almost half of the respondents across all NCSC partner states administered the AA-AAS to one to three students (47%; see Exhibit 11). In addition, 24% of teachers administered the assessment to four to six students and 13% of teachers administered the AA-AAS to seven to ten students. Ten percent of respondents across all NCSC states did not administer the AA-AAS in the 2010-2011 school year (but had administered the test in previous years).

**Exhibit 11. Number of Students for whom Teachers Administered the AA-AAS**

| Number of Students | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-3 Students | n | 101 | 156 | 99 | 18 | 77 | 668 | 55 | 179 | 52 | 52 | 722 | 104 | 37 | 12 | 105 | 47 | 20 | 2,504 |
| | % | 59 | 35 | 53 | 46 | 29 | 46 | 23 | 64 | 76 | 45 | 55 | 44 | 43 | 23 | 61 | 36 | 54 | 47 |
| 4-6 Students | n | 27 | 92 | 35 | 10 | 74 | 441 | 30 | 62 | 8 | 29 | 289 | 42 | 25 | 23 | 23 | 43 | 12 | 1,265 |
| | % | 16 | 21 | 19 | 26 | 28 | 30 | 13 | 22 | 12 | 25 | 22 | 18 | 29 | 44 | 13 | 33 | 32 | 24 |
| 7-10 Students | n | 21 | 62 | 15 | 2 | 57 | 241 | 52 | 11 | 3 | 20 | 147 | 27 | 10 | 6 | 11 | 26 | 2 | 713 |
| | % | 12 | 14 | 8 | 5 | 21 | 17 | 22 | 4 | 4 | 17 | 11 | 11 | 12 | 12 | 6 | 20 | 5 | 13 |
| 11-20 Students | n | 1 | 28 | 3 | 2 | 26 | 46 | 30 | 3 | 0 | 6 | 57 | 12 | 0 | 3 | 4 | 4 | 0 | 225 |
| | % | 1 | 6 | 2 | 5 | 10 | 3 | 13 | 1 | 0 | 5 | 4 | 5 | 0 | 6 | 2 | 3 | 0 | 4 |
| More than 20 Students | n | 0 | 7 | 0 | 1 | 5 | 6 | 7 | 2 | 0 | 0 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 36 |
| | % | 0 | 2 | 0 | 3 | 2 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| Did not Administer Test this Year | n | 21 | 103 | 35 | 6 | 29 | 56 | 63 | 21 | 5 | 8 | 82 | 52 | 14 | 8 | 27 | 9 | 3 | 542 |
| | % | 12 | 23 | 19 | 15 | 11 | 4 | 27 | 8 | 7 | 7 | 6 | 22 | 16 | 15 | 16 | 7 | 8 | 10 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

*Note. The selection "Did not administer test this year" suggests the teacher did not administer the AA-AAS in the 2010-2011 school year, but had administered the test in previous years.*

Respondents reported a range of experience administering the AA-AAS across all states, with 39% having administered the AA-AAS for one to three years and 29% having administered the assessment for four to six years (see Exhibit 12). Compared to other NCSC partner states, State 4 reported a relatively high percentage of teachers with 1-3 years of experience administering the assessment (62%) and a relatively low percentage of teachers with 4-6 years of experience (5%).

**Exhibit 12. Number of Years Teachers have Administered the AA-AAS**

| Number of Years | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-3 Years | n | 72 | 181 | 56 | 24 | 112 | 570 | 82 | 123 | 28 | 64 | 518 | 86 | 32 | 20 | 55 | 44 | 8 | 2,075 |
| | % | 42 | 40 | 30 | 62 | 42 | 39 | 35 | 44 | 41 | 56 | 40 | 36 | 37 | 38 | 32 | 34 | 22 | 39 |
| 4-6 Years | n | 34 | 90 | 55 | 2 | 80 | 604 | 54 | 54 | 21 | 14 | 346 | 41 | 21 | 21 | 66 | 36 | 17 | 1,556 |
| | % | 20 | 20 | 29 | 5 | 30 | 41 | 23 | 19 | 31 | 12 | 27 | 17 | 24 | 40 | 39 | 28 | 46 | 29 |
| 7-10 Years | n | 21 | 51 | 16 | 2 | 11 | 31 | 47 | 24 | 9 | 14 | 203 | 55 | 14 | 5 | 12 | 17 | 3 | 535 |
| | % | 12 | 11 | 9 | 5 | 4 | 2 | 20 | 9 | 13 | 12 | 16 | 23 | 16 | 10 | 7 | 13 | 8 | 10 |
| More than 10 Years | n | 0 | 24 | 17 | 0 | 1 | 9 | 5 | 8 | 1 | 0 | 28 | 9 | 0 | 1 | 3 | 12 | 0 | 118 |
| | % | 0 | 5 | 9 | 0 | 0 | 1 | 2 | 3 | 1 | 0 | 2 | 4 | 0 | 2 | 2 | 9 | 0 | 2 |
| No Response | n | 44 | 102 | 43 | 11 | 64 | 244 | 49 | 69 | 9 | 23 | 207 | 48 | 19 | 5 | 35 | 20 | 9 | 1,001 |
| | % | 26 | 23 | 23 | 28 | 24 | 17 | 21 | 25 | 13 | 20 | 16 | 20 | 22 | 10 | 20 | 16 | 24 | 19 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

**Research Question 2: What is the range of background training among teachers who administer the AA-AAS?**

Most of the survey respondents across all NCSC partner states indicated that they have a master's degree or higher (68%; see Exhibit 13), with an additional 19% having a bachelor's degree plus additional credits. Eight percent of teachers across all states indicated that they have only a bachelor's degree. In comparison to other NCSC partner states, State 11 reported a relatively high percentage of teachers with a master's degree or higher (94%) and State 8 and State 15 reported relatively low percentages of teachers with a master's degree or higher (41% and 41%, respectively).

**Exhibit 13. Number and Percentage of Teachers by Their Highest Degree Level**

| Highest Degree | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bachelor's Degree | n | 7 | 39 | 2 | 1 | 44 | 201 | 9 | 39 | 3 | 0 | 7 | 4 | 8 | 9 | 7 | 22 | 0 | 402 |
| | % | 4 | 9 | 1 | 3 | 16 | 14 | 4 | 14 | 4 | 0 | 1 | 2 | 9 | 17 | 4 | 17 | 0 | 8 |
| Bachelor's Degree plus Additional Credits | n | 71 | 122 | 13 | 9 | 86 | 241 | 53 | 107 | 31 | 24 | 30 | 64 | 31 | 11 | 80 | 32 | 15 | 1,020 |
| | % | 42 | 27 | 7 | 23 | 32 | 17 | 22 | 38 | 46 | 21 | 2 | 27 | 36 | 21 | 47 | 25 | 41 | 19 |
| Master's Degree | n | 14 | 82 | 72 | 9 | 68 | 489 | 65 | 47 | 7 | 22 | 491 | 69 | 15 | 14 | 20 | 39 | 7 | 1,530 |
| | % | 8 | 18 | 39 | 23 | 25 | 34 | 27 | 17 | 10 | 19 | 38 | 29 | 17 | 27 | 12 | 30 | 19 | 29 |
| Master's Degree plus Additional Credits | n | 71 | 165 | 92 | 14 | 49 | 403 | 91 | 67 | 25 | 62 | 722 | 77 | 30 | 16 | 50 | 26 | 15 | 1,975 |
| | % | 42 | 37 | 49 | 36 | 18 | 28 | 38 | 24 | 37 | 54 | 55 | 32 | 35 | 31 | 29 | 20 | 41 | 37 |
| Doctorate or Professional Degree | n | 1 | 7 | 1 | 2 | 6 | 83 | 0 | 1 | 0 | 3 | 7 | 2 | 1 | 0 | 0 | 5 | 0 | 119 |
| | % | 1 | 2 | 1 | 5 | 2 | 6 | 0 | 0 | 0 | 3 | 1 | 1 | 1 | 0 | 0 | 4 | 0 | 2 |
| Not Specified | n | 7 | 33 | 7 | 4 | 15 | 41 | 19 | 17 | 2 | 4 | 45 | 23 | 1 | 2 | 14 | 5 | 0 | 239 |
| | % | 4 | 7 | 4 | 10 | 6 | 3 | 8 | 6 | 3 | 3 | 3 | 10 | 1 | 4 | 8 | 4 | 0 | 5 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Respondents specified their college majors and/or the field(s) in which they hold an advanced degree. Across all NCSC partner states, 76% of respondents reported that they hold a degree in special education (see Exhibit 14). Only 26% of respondents indicated that they have a degree concentrated in an academic content area (mathematics, language arts, science, or social studies).

**Exhibit 14. Number and Percentage of Teachers by Fields of Study in which they hold an Advanced Degree**

| Fields of Study | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Special Ed Only | n | 55 | 115 | 79 | 7 | 119 | 580 | 68 | 31 | 13 | 32 | 248 | 80 | 15 | 27 | 13 | 52 | 5 | 1,539 |
| | % | 32 | 26 | 42 | 18 | 44 | 40 | 29 | 11 | 19 | 28 | 19 | 33 | 17 | 52 | 8 | 40 | 14 | 29 |
| Special Ed and Education | n | 63 | 135 | 56 | 7 | 55 | 271 | 98 | 72 | 39 | 38 | 406 | 87 | 52 | 11 | 121 | 38 | 23 | 1,572 |
| | % | 37 | 30 | 30 | 18 | 21 | 19 | 41 | 26 | 57 | 33 | 31 | 36 | 60 | 21 | 71 | 29 | 62 | 30 |
| Special Ed and Content Area | n | 8 | 52 | 23 | 10 | 17 | 199 | 13 | 36 | 2 | 13 | 189 | 26 | 7 | 7 | 5 | 17 | 2 | 626 |
| | % | 5 | 12 | 12 | 26 | 6 | 14 | 5 | 13 | 3 | 11 | 15 | 11 | 8 | 13 | 3 | 13 | 5 | 12 |
| Special Ed and Education and Content Area | n | 11 | 21 | 3 | 1 | 2 | 27 | 3 | 12 | 3 | 7 | 150 | 3 | 2 | 2 | 8 | 4 | 2 | 261 |
| | % | 6 | 5 | 2 | 3 | 1 | 2 | 1 | 4 | 4 | 6 | 12 | 1 | 2 | 4 | 5 | 3 | 5 | 5 |
| Any Special Ed Training | n | 137 | 323 | 161 | 25 | 193 | 1,077 | 182 | 151 | 57 | 90 | 993 | 196 | 76 | 47 | 147 | 111 | 32 | 3,998 |
| | % | 80 | 72 | 86 | 64 | 72 | 74 | 77 | 54 | 84 | 78 | 76 | 82 | 88 | 90 | 86 | 86 | 86 | 76 |
| Education Only | n | 16 | 23 | 6 | 2 | 27 | 122 | 18 | 25 | 6 | 8 | 45 | 11 | 3 | 1 | 4 | 5 | 1 | 323 |
| | % | 9 | 5 | 3 | 5 | 10 | 8 | 8 | 9 | 9 | 7 | 3 | 5 | 3 | 2 | 2 | 4 | 3 | 6 |
| Education and Content Area | n | 2 | 15 | 4 | 5 | 5 | 61 | 3 | 16 | 1 | 4 | 67 | 1 | 2 | 2 | 1 | 4 | 2 | 195 |
| | % | 1 | 3 | 2 | 13 | 2 | 4 | 1 | 6 | 1 | 3 | 5 | 0 | 2 | 4 | 1 | 3 | 5 | 4 |
| Any Education Training | n | 92 | 194 | 69 | 15 | 89 | 481 | 122 | 125 | 49 | 57 | 668 | 102 | 59 | 16 | 134 | 51 | 28 | 2,351 |
| | % | 54 | 43 | 37 | 38 | 33 | 33 | 51 | 45 | 72 | 50 | 51 | 43 | 69 | 31 | 78 | 40 | 76 | 44 |
| Content Area Only | n | 2 | 31 | 5 | 1 | 24 | 97 | 4 | 56 | 1 | 5 | 74 | 6 | 2 | 0 | 3 | 4 | 2 | 317 |
| | % | 1 | 7 | 3 | 3 | 9 | 7 | 2 | 20 | 1 | 4 | 6 | 3 | 2 | 0 | 2 | 3 | 5 | 6 |
| Any Content Area Training | n | 23 | 119 | 35 | 17 | 48 | 384 | 23 | 120 | 7 | 29 | 480 | 36 | 13 | 11 | 17 | 29 | 8 | 1,399 |
| | % | 13 | 27 | 19 | 44 | 18 | 26 | 10 | 43 | 10 | 25 | 37 | 15 | 15 | 21 | 10 | 22 | 22 | 26 |

**Research Question 3: To what extent do teachers who administer the AA-AAS believe that academic content is an important focus area in their students' instruction?**

The third section of the survey asked teachers to estimate the beliefs and attitudes of their peers about what students with the most significant cognitive disabilities should be learning. The questions asked teachers about their peers' perceptions in an effort to control for what has been called impression management or "social desirability" bias (Crowne & Marlowe, 1964; Fowler, 2009). Because many teachers are aware that the shift from teaching functional skills to academic content in the classroom has been controversial, they may be more likely to report frankly their observations of the beliefs of other teachers, even if these beliefs are "socially undesirable," than to report their own. This section asked teachers to estimate what percentage (0, 25, 50, 75, or 100%) of their peers would agree with the following five statements:

1. It is important that students with significant cognitive disabilities have access to the same ideas and content that their same-age, typical peers are learning.

2. Students with the most significant cognitive disabilities should master functional skills, or daily life skills, before beginning to learn academics like reading and mathematics.

3. Students with the most significant cognitive disabilities can effectively learn functional skills, or daily life skills, when embedded in academic instruction aligned to the grade-level curriculum.

4. It is important for students with <u>mild/moderate disabilities</u> to learn reading, mathematics, and science.

5. It is important for students with <u>severe/profound disabilities</u> to learn reading, mathematics, and science.

Taken as a whole, teachers' estimates of their peers' beliefs may reveal the kinds of attitudes and beliefs prominent across NCSC partner states.

Less than one-third of the total respondents (28%; see Exhibit 15) estimated that *all* or *most* of their peers would agree with the statement, "It is important that students with significant cognitive disabilities have access to the same ideas and content that their same-age, typical peers are learning," although 53% responded that at least half of their peers would agree. The percentages of respondents' estimated peer belief across states were similar to the total percentages of all respondents. This may indicate moderate acceptance among teachers in NCSC partner states that students with significant cognitive disabilities should have access to grade-level content.

**Exhibit 15. Number and Percentage of Respondents' Estimated Peer Belief that Students Should have Access to the Same Ideas and Content as Their Same-age Typical Peers**

| Percentage | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None (0%) | n | 5 | 42 | 11 | 3 | 18 | 272 | 18 | 17 | 4 | 19 | 135 | 8 | 3 | 2 | 7 | 12 | 3 | 579 |
| | % | 3 | 9 | 6 | 8 | 7 | 19 | 8 | 6 | 6 | 17 | 10 | 3 | 3 | 4 | 4 | 9 | 8 | 11 |
| Some (25%) | n | 46 | 129 | 59 | 6 | 97 | 523 | 75 | 75 | 11 | 34 | 289 | 67 | 17 | 15 | 34 | 43 | 10 | 1,530 |
| | % | 27 | 29 | 32 | 15 | 36 | 36 | 32 | 27 | 16 | 30 | 22 | 28 | 20 | 29 | 20 | 33 | 27 | 29 |
| Half (50%) | n | 42 | 118 | 56 | 9 | 63 | 305 | 64 | 65 | 14 | 34 | 332 | 78 | 30 | 14 | 42 | 37 | 13 | 1,316 |
| | % | 25 | 26 | 30 | 23 | 24 | 21 | 27 | 23 | 21 | 30 | 25 | 33 | 35 | 27 | 25 | 29 | 35 | 25 |
| Most (75%) | n | 45 | 84 | 38 | 6 | 49 | 210 | 31 | 57 | 23 | 15 | 310 | 42 | 17 | 9 | 43 | 24 | 9 | 1,012 |
| | % | 26 | 19 | 20 | 15 | 18 | 14 | 13 | 21 | 34 | 13 | 24 | 18 | 20 | 17 | 25 | 19 | 24 | 19 |
| All (100%) | n | 15 | 34 | 12 | 11 | 26 | 75 | 19 | 39 | 10 | 6 | 161 | 17 | 17 | 8 | 26 | 7 | 2 | 485 |
| | % | 9 | 8 | 6 | 28 | 10 | 5 | 8 | 14 | 15 | 5 | 12 | 7 | 20 | 15 | 15 | 5 | 5 | 9 |
| No Response | n | 18 | 41 | 11 | 4 | 15 | 73 | 30 | 25 | 6 | 7 | 75 | 27 | 2 | 4 | 19 | 6 | 0 | 363 |
| | % | 11 | 9 | 6 | 10 | 6 | 5 | 13 | 9 | 9 | 6 | 6 | 11 | 2 | 8 | 11 | 5 | 0 | 7 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Nearly two-thirds of the total respondents (64%; see Exhibit 16) estimated that all or most of their peers would agree with the statement, "Students with the most significant cognitive disabilities should master functional skills, or daily life skills, before beginning to learn academics like reading and mathematics," and 81% responded that at least half of their peers would agree. The percentages of respondents' estimated peer belief across states were similar to the total percentages of all respondents. This may suggest that, while teachers generally believe that students with significant cognitive disabilities should have access to grade-level content, they tend to agree that students should not learn this content until they have mastered functional skills.

**Exhibit 16. Number and Percentage of Respondents' Estimated Peer Belief that Students Should Master Functional Skills Before Academics**

| Percentage of Peers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None (0%) | n | 11 | 11 | 5 | 1 | 12 | 24 | 11 | 9 | 2 | 3 | 23 | 6 | 4 | 4 | 10 | 2 | 2 | 140 |
| | % | 6 | 2 | 3 | 3 | 4 | 2 | 5 | 3 | 3 | 3 | 2 | 3 | 5 | 8 | 6 | 2 | 5 | 3 |
| Some (25%) | n | 23 | 56 | 24 | 2 | 23 | 79 | 30 | 33 | 10 | 14 | 97 | 26 | 9 | 2 | 25 | 14 | 5 | 472 |
| | % | 13 | 13 | 13 | 5 | 9 | 5 | 13 | 12 | 15 | 12 | 7 | 11 | 10 | 4 | 15 | 11 | 14 | 9 |
| Half (50%) | n | 48 | 93 | 41 | 10 | 52 | 173 | 48 | 49 | 16 | 22 | 225 | 46 | 12 | 12 | 35 | 30 | 9 | 921 |
| | % | 28 | 21 | 22 | 26 | 19 | 12 | 20 | 18 | 24 | 19 | 17 | 19 | 14 | 23 | 20 | 23 | 24 | 17 |
| Most (75%) | n | 53 | 162 | 71 | 10 | 86 | 444 | 82 | 94 | 21 | 41 | 450 | 98 | 34 | 19 | 55 | 38 | 15 | 1,773 |
| | % | 31 | 36 | 38 | 26 | 32 | 30 | 35 | 34 | 31 | 36 | 35 | 41 | 40 | 37 | 32 | 29 | 41 | 34 |
| All (100%) | n | 16 | 82 | 35 | 12 | 80 | 664 | 37 | 68 | 12 | 29 | 430 | 35 | 25 | 12 | 28 | 39 | 6 | 1,610 |
| | % | 9 | 18 | 19 | 31 | 30 | 46 | 16 | 24 | 18 | 25 | 33 | 15 | 29 | 23 | 16 | 30 | 16 | 30 |
| No Response | n | 20 | 44 | 11 | 4 | 15 | 74 | 29 | 25 | 7 | 6 | 77 | 28 | 2 | 3 | 18 | 6 | 0 | 369 |
| | % | 12 | 10 | 6 | 10 | 6 | 5 | 12 | 9 | 10 | 5 | 6 | 12 | 2 | 6 | 11 | 5 | 0 | 7 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Respondents across all states were relatively divided about how their peers might react to the statement, "Students with the most significant disabilities can effectively learn functional skills, or daily life skills, when embedded in academic instruction aligned to the grade-level curriculum"; 14% of all respondents (see Exhibit 17) estimated that all or most of their peers would agree with this statement, while 43% of all respondents estimated that 0-25% of their peers would agree, and 24% estimated that half of their peers would agree. The mean percentages of respondents' estimated peer belief across states were similar to the total percentages of all respondents. This suggests that teachers are relatively split about whether embedding functional skills into academic instruction represents an effective teaching strategy for students with the most significant cognitive disabilities across NCSC partner states.

**Exhibit 17. Number and Percentage of Respondents' Estimated Peer Belief that Students Can Effectively Learn Functional Skills Embedded in Academic Instruction**

| Percentage of Peers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None (0%) | n | 14 | 62 | 26 | 5 | 33 | 295 | 29 | 13 | 2 | 22 | 179 | 13 | 10 | 5 | 13 | 26 | 4 | 751 |
| | % | 8 | 14 | 14 | 13 | 12 | 20 | 12 | 5 | 3 | 19 | 14 | 5 | 12 | 10 | 8 | 20 | 11 | 14 |
| Some (25%) | n | 33 | 115 | 67 | 7 | 89 | 504 | 78 | 78 | 20 | 35 | 310 | 88 | 20 | 14 | 45 | 35 | 13 | 1,551 |
| | % | 19 | 26 | 36 | 18 | 33 | 35 | 33 | 28 | 29 | 30 | 24 | 37 | 23 | 27 | 26 | 27 | 35 | 29 |
| Half (50%) | n | 56 | 127 | 40 | 6 | 61 | 316 | 55 | 64 | 15 | 29 | 325 | 60 | 25 | 12 | 45 | 38 | 10 | 1,284 |
| | % | 33 | 28 | 21 | 15 | 23 | 22 | 23 | 23 | 22 | 25 | 25 | 25 | 29 | 23 | 26 | 29 | 27 | 24 |
| Most (75%) | n | 37 | 75 | 36 | 9 | 53 | 180 | 29 | 61 | 15 | 18 | 283 | 33 | 16 | 13 | 33 | 18 | 8 | 917 |
| | % | 22 | 17 | 19 | 23 | 20 | 12 | 12 | 22 | 22 | 16 | 22 | 14 | 19 | 25 | 19 | 14 | 22 | 7 |
| All (100%) | n | 11 | 25 | 7 | 8 | 15 | 81 | 16 | 35 | 10 | 4 | 123 | 17 | 12 | 5 | 17 | 6 | 2 | 394 |
| | % | 6 | 6 | 4 | 21 | 6 | 6 | 7 | 13 | 15 | 3 | 9 | 7 | 14 | 10 | 10 | 5 | 5 | 7 |
| No Response | n | 20 | 44 | 11 | 4 | 17 | 82 | 30 | 27 | 6 | 7 | 82 | 28 | 3 | 3 | 18 | 6 | 0 | 388 |
| | % | 12 | 10 | 6 | 10 | 6 | 6 | 13 | 10 | 9 | 6 | 6 | 12 | 3 | 6 | 11 | 5 | 0 | 7 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Nearly two-thirds of all respondents (64%; see Exhibit 18) estimated that most or all of their peers would agree with the statement, "It is important for students with mild/moderate disabilities to learn reading, mathematics, and science." Overall, 34% estimated that all of their peers would agree with this statement, ranging from 23% of respondents in State 7 to 60% of respondents in State 9. This suggests widespread acceptance among teachers in NCSC partner states that students with mild/moderate disabilities can and should learn academics.

**Exhibit 18. Number and Percentage of Respondents' Estimated Peer Belief that Learning Academics is Important for Students with Mild/Moderate Disabilities**

| Percentage of Peers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None (0%) | n | 0 | 4 | 1 | 0 | 1 | 32 | 1 | 2 | 0 | 2 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 51 |
| | % | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| Some (25%) | n | 5 | 47 | 8 | 1 | 16 | 222 | 22 | 24 | 0 | 6 | 61 | 15 | 5 | 6 | 7 | 2 | 3 | 450 |
| | % | 3 | 10 | 4 | 3 | 6 | 15 | 9 | 9 | 0 | 5 | 5 | 6 | 6 | 12 | 4 | 2 | 8 | 9 |
| Half (50%) | n | 22 | 119 | 25 | 5 | 46 | 347 | 53 | 41 | 5 | 27 | 240 | 34 | 11 | 8 | 16 | 18 | 8 | 1,025 |
| | % | 13 | 27 | 13 | 13 | 17 | 24 | 22 | 15 | 7 | 23 | 18 | 14 | 13 | 15 | 9 | 14 | 22 | 19 |
| Most (75%) | n | 57 | 123 | 65 | 10 | 74 | 423 | 78 | 93 | 15 | 42 | 412 | 75 | 21 | 17 | 40 | 39 | 11 | 1,595 |
| | % | 33 | 27 | 35 | 26 | 28 | 29 | 33 | 33 | 22 | 37 | 32 | 31 | 24 | 33 | 23 | 30 | 30 | 30 |
| All (100%) | n | 69 | 112 | 75 | 17 | 112 | 354 | 54 | 92 | 41 | 32 | 500 | 85 | 46 | 18 | 91 | 62 | 14 | 1,774 |
| | % | 40 | 25 | 40 | 44 | 42 | 24 | 23 | 33 | 60 | 28 | 38 | 36 | 53 | 35 | 53 | 48 | 38 | 34 |
| No Response | n | 18 | 43 | 13 | 6 | 19 | 80 | 29 | 26 | 7 | 6 | 83 | 30 | 2 | 3 | 17 | 7 | 1 | 390 |
| | % | 11 | 10 | 7 | 15 | 7 | 5 | 12 | 9 | 10 | 5 | 6 | 13 | 2 | 6 | 10 | 5 | 3 | 7 |
| Total | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Only 11% of all respondents (see Exhibit 19) estimated that all or most of their peers would agree with the statement "It is important for students with severe/profound disabilities to learn reading, mathematics, and science." Nearly two-thirds of all respondents (66%) estimated that only some or none of their peers would agree with this statement, and over a quarter (28%) estimated that 0% of their peers would agree. This may indicate that most teachers in NCSC partner states may believe that it is not important for students with severe/profound cognitive disabilities to learn academics.

**Exhibit 19. Number and Percentage of Respondents' Estimated Peer Belief that Learning Academics is Important for Students with Severe/Profound Disabilities**

| Percentage of Peers | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **None** | n | 27 | 127 | 42 | 6 | 78 | 638 | 53 | 55 | 6 | 40 | 280 | 37 | 16 | 13 | 24 | 32 | 4 | 1,478 |
| **(0%)** | % | 16 | 28 | 22 | 15 | 29 | 44 | 22 | 20 | 9 | 35 | 22 | 15 | 19 | 25 | 14 | 25 | 11 | 28 |
| **Some** | n | 73 | 176 | 81 | 12 | 117 | 517 | 106 | 103 | 24 | 47 | 445 | 116 | 32 | 24 | 58 | 59 | 18 | 2,008 |
| **(25%)** | % | 43 | 39 | 43 | 31 | 44 | 35 | 45 | 37 | 35 | 41 | 34 | 49 | 37 | 46 | 34 | 46 | 49 | 38 |
| **Half** | n | 29 | 64 | 32 | 6 | 35 | 145 | 29 | 59 | 15 | 16 | 283 | 33 | 15 | 6 | 40 | 20 | 13 | 840 |
| **(50%)** | % | 17 | 14 | 17 | 15 | 13 | 10 | 12 | 21 | 22 | 14 | 22 | 14 | 17 | 12 | 23 | 16 | 35 | 16 |
| **Most** | n | 14 | 23 | 12 | 7 | 15 | 44 | 10 | 23 | 11 | 5 | 147 | 19 | 12 | 5 | 16 | 8 | 0 | 371 |
| **(75%)** | % | 8 | 5 | 6 | 18 | 6 | 3 | 4 | 8 | 16 | 4 | 11 | 8 | 14 | 10 | 9 | 6 | 0 | 7 |
| **All (100%)** | n | 10 | 16 | 8 | 4 | 8 | 37 | 8 | 12 | 6 | 1 | 74 | 6 | 8 | 1 | 16 | 4 | 2 | 221 |
| | % | 6 | 4 | 4 | 10 | 3 | 3 | 3 | 4 | 9 | 1 | 6 | 3 | 9 | 2 | 9 | 3 | 5 | 4 |
| **No** | n | 18 | 42 | 12 | 4 | 15 | 77 | 31 | 26 | 6 | 6 | 73 | 28 | 3 | 3 | 17 | 6 | 0 | 367 |
| **Response** | % | 11 | 9 | 6 | 10 | 6 | 5 | 13 | 9 | 9 | 5 | 6 | 12 | 3 | 6 | 10 | 5 | 0 | 7 |
| **Total** | n | 171 | 448 | 187 | 39 | 268 | 1,458 | 237 | 278 | 68 | 115 | 1,302 | 239 | 86 | 52 | 171 | 129 | 37 | 5,285 |

Section 3 of the survey asked teachers to estimate, based on their own observations and perceptions, what percentages of students fit a number of communication and academic profiles identifiable from LCI data, including students who: a) can, at a minimum, read basic sight words and simple sentences; b) can communicate with verbal or written words, signs, or Braille; and c) know how to solve basic math problems with or without a calculator. These data were compared with the results from the Kearns et al. (2011) and the Towles-Reeves et al. (2012) study.

The total respondents' estimates of the reading, communication, and math abilities (37%, 51%, and 35%, respectively; see Exhibit 20) of students who participate in the AA-AAS were lower than the results of the Kearns et al. (2011) study (65%, 72%, and 46%, respectively) as well as the results of the Towles-Reeves et al. (2012) study (65%, 69%, and 48%, respectively). The data presented in Exhibit 20 should be interpreted with some caution, as unlike previous studies (Towles-Reeves et al., 2009; Kearns et al., 2011), these results are not based on individual student data, but rather teacher estimates of the range or percentage of students in the AA-AAS who have these skills.

**Exhibit 20. Teachers' Estimates of Student Characteristics**

| Average Estimated Percentage | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Reading** | % | 41 | 36 | 43 | 29 | 36 | 27 | 40 | 29 | 58 | 29 | 46 | 48 | 39 | 28 | 45 | 31 | 43 | 37 |
| **Communication** | % | 56 | 50 | 55 | 48 | 51 | 44 | 56 | 46 | 66 | 44 | 56 | 62 | 54 | 49 | 58 | 48 | 52 | 51 |
| **Mathematics** | % | 42 | 33 | 39 | 27 | 34 | 26 | 37 | 28 | 55 | 29 | 42 | 45 | 33 | 26 | 43 | 30 | 40 | 35 |

**Research Question 4: To what extent do teachers who administer the AA-AAS set challenging, attainable goals for their students?**

Section 4 of the survey asked about teachers' ideas of meaningful and appropriate post-school outcomes for students with the most significant cognitive disabilities. Rather than having teachers rank each potential outcome individually, teachers were asked to evaluate each goal in relation to the next. This method allowed teachers to express how they would prioritize preparing students for some future goals over others. Researchers asked teachers to divide 100 points across some or all of the following ten potential future goals:

1. The student can go shopping independently.

2. The student can do household chores.

3. The student participates in community organizations and events.

4. The student can read for pleasure or for vocational/daily living purposes.

5. The student can employ basic math functions (e.g., adding, multiplying).

6. The student can express ideas, choices, preferences, and needs in a way that a variety of people will understand.

7. The student has targeted job skills.

8. The student can socialize with peers.

9. The student has developed enjoyable hobbies such as music, sports, art, or crafts.

10. The student can access post-secondary education or vocational training.

The results may give an initial sense of teachers' ideas of meaningful goals for students, which may have implications for college and career readiness for students who participate in AA-AAS.

**Exhibit 21. Mean, Standard Deviation, Minimum, and Maximum of Teachers' Values Assigned to Post-School Outcome Goals by State**

| Goal | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Avg. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Go shopping independently** | Mean | 8.7 | 9.1 | 7.7 | 8.2 | 7.2 | 8.9 | 8.8 | 9.4 | 7.5 | 8.6 | 8.0 | 8.9 | 8.6 | 6.8 | 8.6 | 8.3 | 7.4 | 8.5 |
| | SD | 5.7 | 7.5 | 5.1 | 5.4 | 5.3 | 6.0 | 4.9 | 6.0 | 4.2 | 4.9 | 5.2 | 5.3 | 5.6 | 4.9 | 4.8 | 4.7 | 4.5 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 30 | 100 | 30 | 25 | 25 | 57 | 30 | 59 | 20 | 25 | 55 | 33 | 25 | 20 | 25 | 25 | 18 | |
| **Do household chores** | Mean | 9.0 | 9.7 | 8.9 | 9.5 | 9.5 | 10.4 | 9.5 | 10.1 | 9.2 | 11.3 | 8.7 | 9.2 | 8.6 | 8.4 | 9.6 | 9.9 | 7.6 | 9.6 |
| | SD | 5.2 | 5.5 | 4.9 | 5.8 | 6.8 | 5.8 | 4.2 | 5.4 | 3.9 | 6.5 | 5.1 | 4.5 | 4.4 | 4.8 | 4.0 | 5.0 | 4.1 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 40 | 50 | 30 | 25 | 60 | 50 | 25 | 43 | 20 | 50 | 49 | 21 | 20 | 20 | 22 | 25 | 18 | |
| **Participate in community** | Mean | 9.9 | 8.6 | 9.0 | 8.7 | 8.4 | 8.5 | 8.3 | 9.2 | 9.2 | 8.0 | 9.3 | 8.8 | 10.5 | 9.8 | 8.8 | 8.0 | 9.5 | 8.9 |
| | SD | 9.0 | 4.5 | 4.9 | 5.5 | 6.3 | 5.5 | 4.8 | 7.4 | 3.3 | 4.6 | 5.6 | 4.9 | 5.1 | 5.7 | 4.2 | 4.6 | 5.0 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 100 | 30 | 25 | 25 | 50 | 50 | 32 | 100 | 20 | 25 | 50 | 40 | 25 | 30 | 25 | 30 | 25 | |
| **Read for pleasure or vocational/daily living** | Mean | 8.6 | 8.6 | 8.4 | 8.8 | 9.0 | 8.5 | 9.1 | 9.3 | 9.2 | 8.3 | 8.6 | 9.5 | 9.0 | 9.2 | 8.6 | 8.3 | 9.4 | 8.7 |
| | SD | 4.4 | 5.0 | 5.3 | 4.6 | 6.1 | 5.9 | 5.4 | 5.1 | 4.3 | 4.4 | 5.3 | 5.0 | 5.5 | 9.6 | 3.8 | 5.5 | 5.7 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 20 | 30 | 40 | 20 | 40 | 50 | 40 | 30 | 20 | 20 | 36 | 30 | 30 | 62 | 20 | 40 | 30 | |
| **Employ basic math** | Mean | 8.1 | 8.3 | 7.9 | 8.3 | 8.0 | 8.2 | 8.7 | 8.6 | 8.7 | 9.1 | 8.3 | 9.3 | 8.0 | 7.5 | 8.8 | 8.2 | 8.7 | 8.3 |
| | SD | 4.5 | 4.6 | 4.7 | 5.1 | 5.4 | 6.4 | 5.3 | 4.6 | 4.2 | 4.9 | 5.2 | 5.2 | 4.6 | 7.0 | 5.6 | 4.6 | 5.1 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 25 | 30 | 25 | 20 | 40 | 100 | 30 | 25 | 20 | 20 | 32 | 30 | 25 | 38 | 55 | 25 | 30 | |
| **Express ideas, choices, needs** | Mean | 16.3 | 16.4 | 18.3 | 14.9 | 20.1 | 17.9 | 15.9 | 14.9 | 15.3 | 17.2 | 17.5 | 16.1 | 16.9 | 21.8 | 14.8 | 18.6 | 19.9 | 17.3 |
| | SD | 12.1 | 10.8 | 12.2 | 8.4 | 16.1 | 13.6 | 9.1 | 9.8 | 9.3 | 10.2 | 13.9 | 10.6 | 9.7 | 15.8 | 7.9 | 15.6 | 15.6 | |
| | Min | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 100 | 85 | 70 | 50 | 100 | 100 | 53 | 75 | 60 | 60 | 100 | 75 | 50 | 75 | 50 | 100 | 80 | |
| **Has targeted job skills** | Mean | 10.6 | 11.6 | 11.2 | 11.1 | 11.0 | 11.1 | 12.6 | 10.8 | 11.2 | 12.0 | 10.9 | 11.4 | 10.3 | 10.5 | 12.3 | 12.8 | 10.4 | 11.2 |
| | SD | 5.7 | 7.4 | 6.1 | 6.3 | 7.7 | 6.6 | 6.9 | 7.5 | 5.0 | 6.4 | 7.1 | 6.0 | 6.1 | 7.2 | 9.2 | 8.4 | 5.0 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 35 | 50 | 40 | 25 | 55 | 51 | 50 | 50 | 30 | 40 | 70 | 40 | 40 | 40 | 100 | 50 | 25 | |
| **Socialize with peers** | Mean | 11.5 | 10.9 | 11.4 | 11.3 | 10.8 | 10.4 | 11.1 | 10.2 | 12.2 | 10.0 | 11.5 | 10.3 | 11.6 | 10.0 | 10.9 | 10.4 | 11.0 | 10.9 |
| | SD | 6.1 | 5.3 | 5.5 | 6.6 | 5.9 | 5.7 | 5.3 | 5.2 | 5.2 | 4.8 | 6.2 | 4.6 | 5.4 | 5.1 | 5.0 | 5.3 | 3.9 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 50 | 40 | 40 | 30 | 30 | 50 | 30 | 30 | 40 | 25 | 92 | 30 | 30 | 29 | 50 | 30 | 20 | |
| **Has enjoyable hobbies** | Mean | 9.0 | 8.4 | 9.7 | 8.5 | 8.3 | 8.4 | 8.3 | 9.1 | 9.4 | 7.8 | 8.7 | 8.7 | 9.4 | 8.3 | 10.0 | 7.6 | 9.5 | 8.6 |
| | SD | 4.4 | 4.7 | 8.1 | 5.4 | 5.0 | 5.3 | 4.2 | 4.9 | 3.2 | 4.7 | 6.2 | 7.5 | 4.2 | 4.8 | 5.3 | 4.0 | 5.5 | |

| Goal | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | Avg. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 25 | 32 | 85 | 25 | 30 | 50 | 20 | 30 | 18 | 25 | 100 | 93 | 25 | 20 | 40 | 20 | 30 | |
| Access post-secondary education or training | Mean | 8.4 | 8.4 | 7.5 | 10.7 | 7.8 | 7.5 | 7.7 | 8.4 | 8.2 | 7.7 | 8.6 | 7.9 | 7.2 | 7.6 | 7.5 | 7.9 | 6.6 | 8.0 |
| | SD | 9.2 | 7.6 | 5.7 | 11.2 | 7.1 | 6.7 | 5.9 | 5.9 | 4.7 | 4.4 | 6.4 | 5.6 | 5.0 | 4.9 | 5.7 | 6.7 | 5.1 | |
| | Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | Max | 100 | 100 | 35 | 50 | 50 | 100 | 30 | 50 | 25 | 20 | 50 | 40 | 25 | 19 | 40 | 50 | 20 | |

Across each grade span, the top ranked post-school outcome goal was the goal that students are able to express ideas, choices, preferences, and needs. For teachers in elementary school grades, the mean was slightly higher (mean value of 18.2) than for teachers in middle and high school (see Exhibit 22; mean value of 16.1 for both grade spans).

**Exhibit 22: Top Five Post-School Outcome Goals by Mean for each Grade Span**

| Priority | Rank | Mean | SD | Min | Max |
|---|---|---|---|---|---|
| **Elementary School (Grades K-5)** | | | | | |
| The student can express ideas, choices, preferences, and needs in a way that a variety of people will understand | 1 | 18.2 | 12.9 | 0 | 100 |
| The student can socialize with peers | 2 | 11.3 | 5.7 | 0 | 50 |
| The student has targeted job skills | 3 | 10.9 | 6.5 | 0 | 70 |
| The student can read for pleasure or for vocational/daily living purposes | 4 | 9.3 | 5.9 | 0 | 50 |
| The student can do household chores | 5 | 9.3 | 5.1 | 0 | 50 |
| **Middle School (Grades 6-8)** | | | | | |
| Priority | Rank | Mean | SD | Min | Max |
| The student can express ideas, choices, preferences, and needs in a way that a variety of people will understand | 1 | 16.1 | 11.8 | 0 | 100 |
| The student has targeted job skills | 2 | 11.5 | 6.5 | 0 | 50 |
| The student can socialize with peers | 3 | 10.2 | 5.2 | 0 | 71 |
| The student can do household chores | 4 | 9.7 | 5.2 | 0 | 60 |
| The student can go shopping independently | 5 | 8.9 | 5.4 | 0 | 57 |
| **High School (Grades 9-12)** | | | | | |
| Priority | Rank | Mean | SD | Min | Max |
| The student can express ideas, choices, preferences, and needs in a way that a variety of people will understand | 1 | 16.1 | 12.1 | 0 | 100 |
| The student has targeted job skills | 2 | 12.0 | 7.9 | 0 | 100 |
| The student can socialize with peers | 3 | 10.7 | 6.0 | 0 | 92 |
| The student can do household chores | 4 | 9.9 | 4.7 | 0 | 40 |
| The student can access post-secondary education or vocational training | 5 | 9.2 | 8.0 | 0 | 100 |

## Limitations

The purpose of this survey was to provide a baseline measure of teachers' beliefs and perceptions about students who participate in AA-AAS, appropriate instruction for these students, and their post-school outcome goals. As with any research, there were limitations that affect the interpretations that can be drawn from this study. First, the sample of teachers in each state may not be representative of teachers who teach and administered AA-AAS across the state. Because the response rate for states could not be calculated and there was no information about the non-responders, the descriptive statistics should be interpreted with caution.

In addition, the methodology used to gather data for the teacher perception questions (which asked about the beliefs of the teachers' peers) was one way in which to control for "social desirability" bias, but also presented results that were estimates of beliefs rather than teachers' own beliefs. While the chosen methodology was intended to get at true beliefs, it may have introduced an additional layer of interpretation and possibly confounding results.

Finally, the stem for one survey question did not indicate students with "the most" significant cognitive disabilities which might have skewed the results given that teachers were considering students who participate in the AA-AAS, but not those with the most significant cognitive disabilities. These data should be interpreted with extra caution.

## Implications for Consideration

Results from the survey will be used to guide professional development. In addition, consideration will be given to the findings when developing instructional resources designed for teacher use.

### Teacher Experience and Inclusive Practices

The first half of this survey focused on gathering teacher demographics and creating a description of the current population of special education teachers administering AA-AAS during the 2010-2011 school year. These results will be used to understand the characteristics of current special educators and the classrooms in which they teach, and provide suggestions for development of capacity, instructional resources, and inclusion (promoting access to the general education academic content).

Since de-institutionalization began in the 1970s, the theoretical models for what and how students with the most significant cognitive disabilities learn best have evolved from the developmental model, to the functional model, to the inclusive/social justice model, to the academic model (Brown, 1982; Newmann & Wehlage, 1995; Rose & Meyer, 2002; Wiggins & McTighe, 1998). In the 1970s, teachers and service providers applied the developmental model to serve this population of students, so that students were taught only those skills appropriate to their "mental" age. As more students entered the public school system during the 1980s, the educational focus shifted to functional and daily life skills instruction so that students could complete those daily activities supporting independence. The decade of the 1990s focused on social justice

and teachers were encouraged to educate students with the most significant cognitive disabilities alongside same age peers without disabilities, in addition to teaching important life skills. Finally, as the field moved into the 21st century, federal policy placed an emphasis on access to the general education academic content standards in reading, mathematics, and science; again, this was to be balanced with addressing other student needs (including life skill instruction) as outlined in the student's IEP (Browder, Flowers, Ahlgrim-Delzell, Karvonen, Spooner, & Algozzine, 2004).

Interestingly, when looking at years of experience in special education for the respondents to this survey, 29% of teachers had less than six years of experience while 64% had seven or more years of experience and 49% had more than ten years of experience in teaching students with the most significant cognitive disabilities. Teachers who had taught ten years or more (especially those in the field for 20-30 years) witnessed the shift in focus of special education instruction and assessment across these theoretical models for what and how students with the most significant cognitive disabilities learn.

Another consideration illuminated by the survey results is the setting where the majority of special education teachers currently teach and where students receive their education. Most teachers (i.e., 72%) reported teaching in a self-contained classroom, and within those self-contained classrooms it was reported that 49% of students have no access to general education classrooms. Lack of access to academic content knowledge may also contribute to a resistance to the shift toward greater academic expectations for students with the most significant cognitive disabilities. Resources that provide teachers with basic academic content knowledge in a user friendly format are absolutely necessary. Teachers also need the prioritization of content within the Common Core State Standards, so that those with limited access to collaboration with general education teachers or whose experiences and teaching priorities have only focused on functional skills will see academic instruction as feasible and appropriate.

Further, the responses indicated that few students have access to inclusive classrooms, much less direct academic instruction in those classrooms. According to Kleinert, Towles-Reeves, Fluegge, and Weseman (2013):

> While the greatest percentage of students who take state AA-AAS receive special education services through the IDEA categories of intellectual disabilities, multiple disabilities, and autism, students who take the AA-AAS are placed into separate settings (e.g., self-contained classrooms, separate schools, home, hospital, or residential settings) much more frequently than students overall in any of these categories. For example, according to 2009-10 U.S. Department of Education data, 55% of students with intellectual disabilities, 70% of students with multiple disabilities, and 44% of students with autism were served across separate settings. Yet, for students participating in the AA-AAS across our 15 state sample, over 92% were served in self-contained classrooms, separate schools, home, hospital or residential settings. Conversely, in considering less restrictive placements (i.e., regular education or resource room settings), while 44% of all students with intellectual disabilities, 30% of students with multiple

disabilities, and 56% of students with autism were served in regular education or resource room settings, only 7% of students in their respective state AA-AAS were served in either regular education placements (i.e., 80% or more of the day in the general education classroom) or in resource room placements (i.e., 40% to 79% of the day in general education classroom) p. 21-22.

**Professional Development**

In this survey, teachers were asked to estimate peer beliefs around the importance and appropriateness of academic content for students participating in AA-AAS. Some findings appeared contradictory to each other. For example, teachers estimated that most of their peers believe that students with the most significant cognitive disabilities should have access to the same ideas and content as their same-age peers but teachers also estimated that most of their peers do not feel that academics are important for students with the most significant (severe and profound) disabilities. This aside, other findings from this survey have clear implications for professional development and materials designed to be used by teachers.

The majority of teachers of students with the most significant cognitive disabilities estimated that their peers believe that students should master functional skills before academics. Teachers also estimated that less than half of their peers believe that their students with the most significant disabilities can learn functional skills when embedded into academic instruction. In a two state study of principal perceptions of the AA-AAS, Towles-Reeves, Kleinert, and Anderman (2009) found that principals in that study were actually more positive about students with significant cognitive disabilities learning functional skills embedded into academics than the teachers in the current study reported. However, Towles-Reeves et al. also noted:

> …principals who had been in the field for longer periods of time did not think grade-level academic content was as important for students with significant cognitive disabilities to learn when compared with functional skills. Consequently, these findings suggest the importance of professional development for principals (especially for those in the field for longer periods of time) related to several topics: the development of AA-AAS at the state level and approaches used for the state's AA-AAS, access to the general curriculum for students with the most significant cognitive disabilities, and the instruction and assessment of these students on grade-level academic content standards…

Capacity building is necessary to facilitate a shift to the importance and meaningfulness of academics for students with the most significant cognitive disabilities. In addition to professional development training on the curricular, instructional, and assessment components, teachers will need extensive instructional materials and resources that demonstrate how functional skills can be taught through meaningful academic activities. This cannot be accomplished by teachers alone. If principals, who provide leadership and resources for the teachers of students with the most significant cognitive disabilities, do not fully believe in and support high expectations for these students, this adds another confounding layer to this already difficult issue of capacity building for teachers. Capacity building most certainly must be targeted at teachers of students with

the most significant cognitive disabilities, but to sustain the lessons learned during these professional development opportunities, principals and other leaders must also understand and support the needs of the teachers and students who participate in AA-AAS.

Responses to several questions indicated that the majority of teachers may not be confident that students with the most significant cognitive disabilities can be successful in academics. This may be because, while in recent years it has become increasingly apparent that students with the most significant cognitive disabilities *can* learn academic content, those teachers who have continued their education are more likely to have been enrolled in classes where this was the predominant thinking. Teachers who have not pursued ongoing educational opportunities may not have been exposed to this research. Given these results, capacity building that encourages teachers to consider career, college, and community readiness for their students is needed. Curricular and instructional resources and targeted professional development should include examples of how students with the most significant cognitive disabilities can be successful in academic content both while receiving their K-12 education and also in post-school settings. Encouraging teachers to think about the skills needed to be career, college, and community ready may lead to an increased focus on academics, in addition to life and vocational skills. Further, current success stories for students in local districts supported by student data should be provided in all capacity building materials and professional development opportunities.

The shift in the focus of special education from functional skills to academics has occurred gradually over the past decade. It appears that teachers of students with the most significant cognitive disabilities approach academic content with trepidation, and that they are also uncertain as to how functional skills can be embedded into academic instruction. Further, responses to several questions indicated that the majority of teachers may not be confident that students with the most significant cognitive disabilities can be successful in academics. Given the increased focus on academics that will come with the implementation of the Common Core State Standards, targeted professional development will be crucial. Professional development should be ongoing and allow for teacher feedback. Instructional materials and resources that help teachers understand and provide instruction linked to these new standards must be provided.

The survey results also noted that many teachers have caseloads that span grades, rather than just a single grade level or grade span (i.e., 11% in K-8th grade, 5% in 6th-12th grade, and 3% from K-12th grade). In regards to content fluency with the Common Core State Standards, these teachers must be familiar with a wide range of academic content standards and have the ability to individualize instruction to students in sometimes 6, 7, or more individual grade levels. These are lofty expectations for even the most accomplished of teachers.

**Post-School Outcomes**
Across all NCSC partner states, respondents were most likely to prioritize the goal that students are able to express ideas, choices, preferences, and needs, assigning it a mean value of 17.3 across all states whereas the post school outcome goal of having

access to post-secondary education or vocational training was given less priority (mean value of 8.0 across all states). These findings may reflect the high percentage of elementary school teachers responding to the survey for whom communication may be a more immediate priority as communication is the ultimate foundation for students to access the curriculum and participate in assessment.

Success past high school graduation for students with the most significant cognitive disabilities is dependent to a large degree on the attitudes and beliefs described throughout this study. First and foremost, communicative competence is the single most important functional skill for students with the most significant cognitive disabilities that will accomplish both the perceived need for "functional skills" as well as open the door for students to meaningfully engage in academic content. Without communicative competence, the most basic of skills, the likelihood of high quality post-school outcomes is significantly compromised. Students who have no regularized means to communicate wants and needs much less information required by academics, not only risk poor post-school outcomes but are indeed at risk for negative or dangerous post-school outcomes.

Further, the majority of students who participate in AA-AAS already have some academic skills (e.g., reading sight words, math computation). The underlying NCSC model of student learning and research base supports a dual approach to building literacy for students with significant cognitive disabilities. The abstract for a foundational Browder et al. (2009) article suggests there are two important outcomes of instruction in literacy: (i) enhanced quality of life through shared literature and (ii) increased independence as a reader. Continuing to work toward these outcomes while the opportunity and expertise is available through public school is an important opportunity.

Finally, social connections and relationships are a predictor of positive post-school outcomes. One cannot underestimate the power of social relationships and friendships as an avenue not only for social opportunities but career opportunities as well. Students with disabilities who have not only good social skills but social relationships as in friendships and social connections experience better post-school opportunities and outcomes. While social skills may be taught in self-contained settings, social relationships and friendships are most often found in the natural setting of a general education classroom.

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## Appendix A:  Survey Questions

**Background**

Did you administer your state's Alternate Assessment based on Alternate Achievement Standards (AA-AAS) for at least one student this academic year?

☐ Yes
☐ No

For how many students did you administer your state's AA-AAS this year?

_____

Have you administered your state's AA-AAS prior to this year?

☐ Yes
☐ No

**If you answered <u>no</u> to these first two questions, please skip to the end and submit your survey now. If you answered <u>yes</u> to either question, please continue the survey.**

How many years have you administered your state's AA-AAS to at least one student?

_____

At what type of school do you teach?

☐ Charter
☐ Public
☐ Nonpublic

In what type of classroom setting do you teach? Select all that apply.

☐ Inclusive/collaborative general education classroom
☐ Resource room
☐ Self-contained special education classroom
☐ Separate school

What grade(s) do you currently teach? Please check all that apply.

☐ Kindergarten          ☐ Grade 7

☐ Grade 1              ☐ Grade 8

☐ Grade 2              ☐ Grade 9

☐ Grade 3              ☐ Grade 10

☐ Grade 4              ☐ Grade 11

☐ Grade 5              ☐ Grade 12

☐ Grade 6

How many of your students who participate in your state's AA-AAS have academic courses where they have access to general education teachers and content?

☐ All

☐ Some

☐ None

Counting this school year, how many years have you been:

| | Less than 1 year | 1-3 years | 4-6 years | 7-10 years | More than 10 years |
|---|---|---|---|---|---|
| Teaching in your current school? | ☐ | ☐ | ☐ | ☐ | ☐ |
| A teacher-of-record (teacher in charge of a classroom)? | ☐ | ☐ | ☐ | ☐ | ☐ |
| A special education teacher? | ☐ | ☐ | ☐ | ☐ | ☐ |

What is the highest level of education you have attained?

☐ Bachelor's degree

☐ Bachelor's degree plus additional credits

☐ Master's degree

☐ Master's degree plus additional credits

☐ Doctorate or professional degree (e.g., Ph.D., Ed.D., J.D., M.D.)

What was your college major (or majors), and, if applicable, in which field did you earn an advanced degree? Please write out the full name below (no abbreviations).

_____

Do you have any teaching certificates or other specialized training relevant to your work with students with the most significant cognitive disabilities?

☐    Yes
☐    No                     If so, list them here: _____

**Student Characteristics**

Consider the population of students with the most significant cognitive disabilities, who comprise a very small proportion of the general student population (those who participate in the AA-AAS), to answer the following questions.

Based on recent research, approximately what percentage of students who participate in your state's AA-AAS do you think can, at a minimum, read basic sight words and simple sentences?

| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

Based on recent research, approximately what percentage of students who participate in the AA-AAS do you think can communicate with verbal or written words, signs, or Braille?

| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

Based on recent research, approximately what percentage of students who participate in the AA-AAS knows how to solve basic math problems with or without a calculator?

| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

**Instruction for Students with Significant Cognitive Disabilities**

Think about special education teachers who teach and assess students with significant cognitive disabilities in your district. What percentage of these teachers do you think would agree with each of the following statements?

"It is important that students with significant cognitive disabilities have access to the same ideas and content that their same-age, typical peers are learning."

&#9633; 0%        &#9633; 25%        &#9633; 50%        &#9633; 75%        &#9633; 100%

"Students with the most significant cognitive disabilities should master functional skills, or daily life skills, before beginning to learn academics like reading and mathematics."

&#9633; 0%        &#9633; 25%        &#9633; 50%        &#9633; 75%        &#9633; 100%

"Students with the most significant cognitive disabilities can effectively learn functional skills, or daily life skills, when embedded in academic instruction aligned to the grade-level curriculum."

&#9633; 0%        &#9633; 25%        &#9633; 50%        &#9633; 75%        &#9633; 100%

"It is important for students with <u>mild/moderate disabilities</u> to learn reading, mathematics, and science."

&#9633; 0%        &#9633; 25%        &#9633; 50%        &#9633; 75%        &#9633; 100%

"It is important for students with <u>severe/profound disabilities</u> to learn reading, mathematics, and science."

&#9633; 0%        &#9633; 25%        &#9633; 50%        &#9633; 75%        &#9633; 100%

Please provide comments if you would like to clarify your responses to any of the questions on this page.

_____

_____

_____

_____

_____

_____

**Budgeting for the Future**

Consider the following goals for your student(s) who participate in the AA-AAS. If you had $100 to "spend" on preparing students for future goals, how would you budget your money in order to prioritize what you feel will be the most important outcomes for the student(s)?

For example, if you believe each of the 10 items are equally important for the student, you could budget $10 for each goal. If four goals are particularly important, you could budget $15 for those four, and divide the remaining $40 among the remaining six goals.

You may assign any value between $0 and $100 to each goal.

1) The student can go shopping independently          $_____

2) The student can do household chores                $_____

3) The student participates in community
organizations and events                              $_____

4) The student can read for pleasure or for
vocational/daily living purposes                      $_____

5) The student can employ basic math functions
(e.g., adding, multiplying)                           $_____

6) The student can express ideas, choices, preferences,
and needs in a way that a variety of people will
understand                                            $_____

7) The student has targeted job skills                $_____

8) The student can socialize with peers               $_____

9) The student has developed enjoyable hobbies
such as music, sports, art, or crafts                 $_____

10) The student can access post-secondary education
or vocational training                                $_____

Please provide comments if you would like to clarify your responses to this question.

# Appendix B: Recruitment Letter

Dear Teacher,

You have been invited to participate in this survey research because you are a teacher who has administered the AA-AAS for students with significant cognitive disabilities in one of the 18 states participating in the National Center and State Collaborative (NCSC) General Supervision Enhancement Grant (GSEG). The goal of the NCSC project is to develop a comprehensive assessment system for students with significant cognitive disabilities, including curriculum and instructional modules and comprehensive professional development, as well as an alternate assessment based on alternate achievement standards (AA-AAS) based on the best research available. As a part of this project, edCount, LLC is gathering some information from classroom teachers who work with these students to make sure the project meets your needs as it evolves.

Please answer the following questions as frankly and honestly as you can. The survey/questionnaire will take about 15 minutes to complete. You are free to skip any questions or discontinue the survey at any time. You will not be compensated for participating in the study, but after you submit the survey (regardless of whether you answered every question) you will be directed to a page with interesting and useful resources for special education teachers. If you do not wish to participate but would like to have access to teacher resources, please feel free to contact Alex Barse at abarse@edcount.com and we would be happy to provide them to you.

Your answers will remain completely anonymous and confidential. We will not collect any identifying information about you or your school/district. Neither the research team nor your state AA-AAS staff nor anyone in your school/district will know that any information you provided came from you, or even whether you participated in the study. There are no known risks for participating in this survey. If you have questions about the study, please feel free to ask; my contact information is given below. If you have complaints, suggestions, or questions about your rights as a research volunteer, please contact the University of Minnesota Research Subjects' Advocate Line at 612-625-1650.

The survey is located at [link here].

Thank you for your time and for sharing your thoughts on this topic! To ensure that your response will be included in the research, please submit the survey [within two weeks of the receipt date].

Sincerely,
Mari Quenemoen
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