Educator Survey

Technical Report

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This technical report, along with a copy of the survey, survey data, thematic coding supplement, and associated publications, can be found on our Open Science Framework project page (Wong et al., 2025).

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1. Executive Summary of Key Findings

This technical report presents WestEd's survey development, design, analyses, and results for the Educator Survey administered between January 2024 and December 2024 to a national sample of K-12 educators who teach students with learning disabilities (LD). The survey was administered online from January 2024 to December 2024 where participants were recruited through social media and through publicly available teacher emails. The final sample included 1,654 survey respondents and was weighted by role (general educator vs. special educator), gender, race/ethnicity, and highest degree obtained to approximate a nationally representative sample of K-12 educators. Survey results provide a detailed picture of (1) teaching demographics; (2) school settings; (3) instructional resources and practices available, familiar to, or utilized by teachers; (4) collaboration between general and special educators; (5) inclusion; and (6) stress and resilience.

We used structural equation modeling (SEM) and subgroup analyses to examine factors that influence educators' level of confidence to adapt instruction to meet the needs of students with LD. Factors included perceptions of their own abilities, their colleagues' abilities, their school-leadership, and their working conditions. We also examined whether results varied by subgroups of interest. We provide a summary of the key findings below. This technical report, along with a copy of the survey, survey data, and associated publications, can be found on our Open Science Framework page (Wong et al., 2025).

Key Finding #1: Teachers' willingness to discuss topics related to disability and their comfort implementing practices related to supporting students with LD were significantly related to their level of confidence to adapt instruction to the meet the needs of students with LD..

WestEd utilized SEM to model the extent to which (1) Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and (2) Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics were related to teachers' level of confidence their ability to adapt instruction to meet the needs of students with LD.

Key Finding #2: Teachers' level of confidence to adapt instruction to meet the needs of students with LD is significantly influenced by multiple factors stemming from educators' perceptions of their own abilities, perceptions of their colleagues, perceptions of the school leadership, and perceptions of their workplace.

WestEd utilized SEM to model the extent to which (1) Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators, (2) Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics, (3) Perceptions of Colleagues' Ability to Support Students With or At Risk for LD, (4) Perceptions of Collaborative Culture, (5) Perceptions of Leadership Support, and (6) Perceptions of Resources and Supports were related to teachers' level of confidence in their ability to adapt instruction to meet the needs of students with LD. Results suggest all factors directly and indirectly influence teachers' level of confidence.

Subgroup analyses for the significant latent predictors suggest group differences.

Sub-finding #2.1: Educators exhibited marked differences on our primary outcome of interest, level of confidence in their ability to adapt instruction to meet the needs of students with LD. Results from the subgroup analysis for our outcome suggest differences based on race, number of years teaching, and role where (1) non-White educators reported lower levels of confidence compared to White educators, (2) educators with 0-3 years of teaching experience reported lower levels of confidence compared to educators with 4-9 years and 10 or more years, and (3) special educators reported higher levels of confidence compared to general educators.

Sub-finding #2.2: Educators reported differences on the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor. Results from the subgroup analyses for the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor suggest (1) special educators exhibited higher levels of willingness compared to general educators and (2) educators with none or less than half of their students below grade level reported higher levels of willingness compared to educators who reported about half of their students below grade level.

Sub-finding #2.3: Educators reported differences in their Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics. Results from the subgroup analyses for the Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics latent factor suggest (1) non-White educators reported lower levels of comfort compared to White educators and (2) special educators exhibited higher levels of comfort compared to general educators.

Sub-finding #2.4: Educators reported differences in their Perceptions of Leadership Support. Results from the subgroup analyses for the Perceptions of Leadership Support latent factor suggest differences based on (1) role where special educators reported more positive perceptions of school leadership compared to general educators and (2) number of students

below grade level where educators who reported none or less than half of their class below grade level reported more positive perceptions than educators with half or more than half of their class below grade level standards.

Sub-finding #2.5: Educators reported differences in their Perceptions of Resources and Supports. Results from the subgroup analyses for the Perceptions of Resources and Supports latent factor suggest differences based on race, certification route, role, and number of students below grade level. However, this model did not meet all model assumptions and should be interpreted with caution.

Sub-finding #2.6: Educators reported differences in their Perceptions of Colleagues' Ability to Support Students With or At Risk for LD. Results from the subgroup analyses for the Perceptions of Colleagues' Ability to Support Students With or At Risk for LD latent factor suggest differences based on (1) race where non-White educators reported more positive perceptions of their colleagues compared to White educators, (2) certification route where educators who attended a teacher preparation program at a college or university reported more positive perceptions compared to educators who took an alternative, emergency, or other route to certification, and (3) number of students below grade level where educators who reported none or less than half of their class below grade level exhibited more positive perceptions of their colleagues' ability compared to educators who reported half or more than half of their students below grade level.

Sub-finding #2.7: Educators reported differences in their Perceptions of Collaborative Culture. Results from the subgroup analyses for the Perceptions of Collaborative Culture latent factor suggest differences based on (1) certification route where educators who attended a teacher preparation program at a college or university reported more positive perceptions compared to educators who took an alternative, emergency, or other route to certification, and (2) number of students below grade level where educators who reported none or less than half of their class below grade level exhibited more positive perceptions of collaborative culture compared to educators who reported half or more than half of their students below grade level.

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2. Introduction

The National Center for Learning Disabilities (NCLD) partners with educators, students, families, and young adults to advance innovative research and advocate for equitable policies that address systemic barriers in schools, workplaces, and communities.

NCLD's research is centered on making sense of best practices for overcoming obstacles for individuals with learning disabilities (LD). As evidence-based practices continue to evolve, it is crucial to close the divide between what is known and what is done to improve the identification of and support for individuals with LD in schools in beyond. To begin to address these disparities, NCLD commissioned WestEd to design and conduct a survey study of (1) young adults with LD and (2) educators who teach students with LD.

The findings from these surveys will serve as a foundation for NCLD's policy initiatives and advocacy efforts. Results from the Young Adult Survey will enhance our understanding of the experiences young adults with LD during high school, including how various high school factors (such as school climate and educator attitudes) influence their enrollment in higher education, their employment status, and their overall well-being. Similarly, the findings from the Educator Survey will deepen our understanding of the current state of educator readiness to instruct students with LD, the resources available to teachers for educating a diverse student body, and the ways in which schools implement and apply a comprehensive support system to support students with LD.

This report focuses on the Educator Survey and provides detailed descriptions of the survey design, process for sampling and recruitment of participants, data analyses, and results.

Findings for the Young Adult Survey as well as the Young Adult Technical Report (Wong et al., 2024a) can be found on our Open Science Framework project page (Wong et al., 2024b).

3. Survey Design

This section outlines the development, pilot, and administration of the Educator Survey.

3.1 Sample

The sample of interest is K-12 educators who teach students with LD. To be included in this sample, educators must:

1. currently teach in a K-12 setting;
2. have provided direct instructional support to K-12 students significantly below benchmarks in reading, writing, or math;
3. have provided direct instruction support to K-12 students identified with LD in reading, writing, or math;
4. be a general educator or special educator;
5. hold at least an associate's degree;
6. currently teach an academic subject area; and
7. currently reside in the United States.

Through the recruitment and sampling methods described below, WestEd aimed to (1) include a minimum of 1,000 participants that met inclusion criteria and (2) approximate national educator estimates for selected educator characteristics, including gender, race/ethnicity, role, and highest level of education.

To approximate national estimates for selected educator characteristics, WestEd utilized data from the National Center for Education Statistics (NCES) and information from NCLD. Educator data reported by the NCES for the 2020-2021 school year provided national educator estimates for gender, race/ethnicity, and highest level of education (NCES, 2023) while NCLD provided thresholds for role (i.e., general educator, special educator). When managing survey responses during the survey window, we used the estimates in Table 1 to (1) compare our survey sample with national estimates and (2) direct further site and participant recruitment efforts. These national estimates were also used to weight the final educator sample prior to data analysis.

Table 1. Survey Design: National Percentages of Educators by Characteristic

Demographic	%
Setting [a]	
General Education	75%
Special Education	25%
Gender [b]	
Female	77%
Male	23%
Race/Ethnicity [b]	
American Indian or Alaska Native	< 1%
Asian	2%
Black	6%
Hispanic	9%
Two or More	2%
Native Hawaiian or Pacific Islander	< 0.5%
White	80%
Highest Level of Education [b]	
Less than Bachelor's	1%
Bachelor's	38%

Demographic	%
Master's	51%
Educational Specialist	8%
Doctorate	1%

[a] **No external source was used. These percentages were based on NCLD's directive for this work.**

[b] **NCES, 2023.**

We then conducted a power analysis to estimate power given the minimum sample size of 1,000 participants. We used the *samplesize4surveys* package (Rojas, 2020) in R (R Core Team, 2024) and based on the analysis on the following assumptions: alpha level of .05, the design effect (DEFF) of the sample design at 3 (DEFF = 1 corresponds to a simple random sampling design), and a standardized mean difference of .20. The standardized mean difference would correspond to mean and standard deviation as follows: if we assume a mean of 100 and standard deviation of 15, our power estimate assumes a difference of + or – 3. We used data from the NCES (2023), which reported a total of 3.5 million teachers in U.S. public schools. We used this number as the population estimate for the power analysis.

Under these assumptions, we found power to be at 97.7% for the educator sample. We estimated power under three additional scenarios: smaller effect size (.13), larger design effect, and smaller sample size. Only the smaller sample size reduced power below acceptable levels (i.e., 80%). A summary is provided in Table 2.

Table 2. Survey Design: Power Analysis

Power	*n*	Difference Between Groups	DEFF
97.7	1,000	3	3
78.5	1,000	2	3
88.1	1,000	3	5
82.5	500	3	3

Based on the power analysis, we believe a minimum sample size of 1,000 survey respondents weighted according to Table 1 will provide a nationally representative sample of K-12 educators.

3.2 Survey Development and Testing

This section describes the processes used to design and develop the Educator Survey. Our goal was to create an online survey to be conducted through Qualtrics, a web-based survey tool. We chose Qualtrics over alternative platforms such as SurveyMonkey because of its capabilities to (1) construct, disseminate, and collect data; (2) detect and filter out automated survey bots; and (3) capture embedded data. A more detailed explanation of each of these functionalities is provided below.

Initial development of survey items was based on the following topics that were collaboratively developed between NCLD and WestEd (see Table 3).

Table 3. Survey Design: Summary of Survey Topics

Topic	Description
Demographics	These items asked questions about where respondents live and respondents' gender, race/ethnicity, highest level of education, and household income.
Teaching Experience	These items asked questions about their teaching credentials, path to certification, and years of teaching.
School and Teaching Setting	These items asked questions about their school (e.g., public or private, Title 1), current classroom setting (e.g., grade levels taught), and school supports for struggling learners/those with LD. Secondary teachers also received items about transition.
Individual Contribution, Knowledge, and Development	These items asked questions about data-based decision making, frequency and perceptions of instructional practices, and classroom materials they use. Additional questions asked about preparing for and participating in Individualized Education Program (IEP) meetings.
Teamwork	These items are about frequency and depth of collaboration with different types of colleagues (e.g., general educators, special educators, paraprofessionals) and perceptions of general/special educators.

Topic	Description
Growth	These items are about general beliefs about the education system, including inclusion of and meeting the needs of SWDs.

3.2.1 Initial Development of Survey Items

Before creating survey items, WestEd examined multiple existing surveys to review items related to our areas of focus. A summary of each source we examined is provided in Table 4.

Table 4. Survey Design: Review of Existing Surveys

Survey	Description and Purpose
Attitudes Matter	Attitudes Matter is a survey developed by the Centre of Research Excellence in Disability and Health from Australia that examines community attitudes toward people with disabilities and includes topics such as common beliefs about disability and behavior and inclusion of people with disabilities (Bollier et al., 2021).
Panorama Teacher and Staff Survey	The Panorama Teacher and Staff Survey includes items on adult social-emotional learning, well-being, school climate, cultural competency, and professional learning (Panorama Education, n.d.).
National Center for Learning Disabilities Survey	This survey was administered by NCLD in previous years and included topics such as teaching academics, staffing and funding, instruction, and well-being.
Schools and Staffing Survey (SASS) and Teacher Follow-Up Survey (TFS)	SASS is administered to a nationally representative sample of teachers to obtain information about teachers' professional backgrounds, workload, and working conditions. A subset of teachers takes the TFS, which focuses on teacher attrition and migration (U.S. Department of Education [USDOE], 2011; 2012a; 2012b).
Teacher Perceptions of their Ability to Teach	This survey was developed by a doctoral student and examines teachers' attitudes and beliefs, perceptions of preparedness, planning and preparation, and challenges and supports related to teaching in inclusive classrooms (VanCleef, 2019).
World Health Organization Quality of Life Survey (WHOQOL)	WHOQOL is a survey developed by the World Health Organization intended to assess perceptions of individuals' position in life in relation to broader culture and value systems and personal goals and expectations (World Health Organization, 1998).

Next, WestEd created an extensive bank of items for each area of interest. Using best practices for survey design for web-based surveys, we prioritized closed response items (e.g., Likert-type, multiple choice, select-all-that-apply). Closed response items are known for their shorter completion times, which increases the likelihood that participants will complete the survey, that we will collect accurate data (Krosnick, 2018), and that we can ask about a broad range of topics (Kost & de Rosa, 2018).

In addition, we incorporated open-ended questions to delve deeper into certain areas or subtopics where we sought additional detail, anticipated a wide range of responses, or believed that an open-response format would reduce the mental effort required to respond. Because open-ended response items typically have higher rates of nonresponse simply due to the item type (Regional Educational Laboratory West, 2021), we strategically positioned these questions towards the conclusion of survey sections, limited their number, and explored the effectiveness of assistive technologies (e.g., speech-to-text capabilities) to alleviate the effort required from respondents.

3.2.2 Iterative Development

WestEd then iteratively developed the Educator Survey with NCLD, with a focus on content, clarity, sequence of items, and survey fatigue.

The content review was a cyclical process between WestEd and NCLD where we assessed whether the proposed items appropriately addressed the area(s) of interest. The clarity review was aimed at minimizing respondent misunderstandings (e.g., participants answering in ways that do not align with the item's intent) by carefully considering the language used in the survey questions (Vannette & Krosnick, 2018). Since states and districts can use different terms for the same practices, we were particularly mindful about consistency in terminology across items. Furthermore, we ensured consistency across the Likert-scales. Finally, we evaluated the sequence of the questions and survey sections to determine how their arrangement might influence participant fatigue and the likelihood of nonresponse (Cobern & Adams, 2020).

Throughout this iterative process, and in line with best practices for online survey design, we targeted a maximum completion time of 20 minutes (Revilla & Ochoa, 2017).

3.2.3 Inclusion of Bot Prevention and Identification Techniques

While online surveys offer advantages such as reaching a wider audience, being cost-effective, and allowing distribution through various platforms like social media and email (Lehdonvirta et al., 2020; Saleh & Bista, 2017), there are concerns regarding data quality due to the activity of both human and nonhuman bots (Teitcher et al., 2015). Bots are computer software that fill out online forms, often faster than a human could (Al-Fannah, 2017), while human bots are individuals who complete surveys usually with the purpose of receiving an incentive (Yarrish et al., 2019). The prevalence of both types of bots participating in online surveys is on the rise

(Griffin et al., 2022; Xu et al., 2022), posing a threat to the validity of the survey data. Nonhuman data is entirely invalid because these programs are just designed to complete forms without genuine responses (Dupuis et al., 2019). Human bot data may be problematic as these participants might not fulfill the survey's eligibility requirements, might not engage thoughtfully with the survey items, and may be driven by secondary motives such as receiving compensation (Chandler & Paolacci, 2017). Without measures to prevent bots, online surveys can quickly become inundated with bot submissions, sometimes receiving hundreds of responses within a day of launch (Pozzar et al., 2020). Further, retaining bot responses in the sample can lead to skewed research results (Simone et al., 2023).

To address the issues posed by human and nonhuman bots, we incorporated CAPTCHAs and hidden items into the survey design and utilized Qualtrics settings designed to block and detect bots. Furthermore, the consent form for the study notified respondents that their inclusion in our study was contingent upon meeting certain data quality criteria (detailed below) and that compensation was restricted to one gift card per participant.

3.2.3.A CAPTCHAs

A CAPTCHA, or Completely Automated Public Turing Test to Tell Computers and Humans Apart, is a security measure used in online forms, including surveys, to deter automated bot entries. It typically involves a task that is straightforward for humans but challenging for computers, such as ticking a box or identifying images with specific objects (Prince et al., 2012; Yarrish et al., 2019). CAPTCHAs are widely implemented across the internet to decrease the likelihood of bot interference (Prince et al., 2012). Within the Qualtrics platform, CAPTCHAs prompt survey participants to check a box indicating they are not a robot. We incorporated CAPTCHAs at two critical points: (1) at the beginning of the survey where respondents agree to participate and (2) on the form to collect contact information for the participation incentive (as detailed later).

3.2.3.B Hidden Items

Hidden items are survey items that are hidden to human respondents and displayed to bot respondents. Since hidden items are only visible to bots, answering the hidden items is a clear indicator of bot activity (Pozzar et al., 2020). Although hidden items might not identify all bots, it is considered best practice in online survey design to include them as they require minimal effort to implement and offer the benefit of potentially filtering out bot-generated data from the survey responses (Pozzar et al., 2020; Storozuk et al., 2020).

In the Qualtrics survey platform, hidden items can be made to appear only to bots through the use of custom Java code (see Figure 1). In Figure 2, we provide a screenshot of what a bot would see: Q5.5, Q5.6 (the hidden item), and Q5.7. In Figure 3, we provide a screenshot of what a human respondent would see (i.e., only Q5.4 and Q5.6).

Figure 1. Survey Design: Screenshot of Custom Java Code for a Hidden Item

```
Qualtrics.SurveyEngine.addOnload(function()
{
    jQuery("#"+this.questionId).hide();
});

Qualtrics.SurveyEngine.addOnReady(function()
{
    /*Place your JavaScript here to run when the page is fully displayed*/

});

Qualtrics.SurveyEngine.addOnUnload(function()
{
    /*Place your JavaScript here to run when the page is unloaded*/

});
```

Figure 2. Survey Design: Screenshot of Hidden Item in Educator Survey (Development Side)

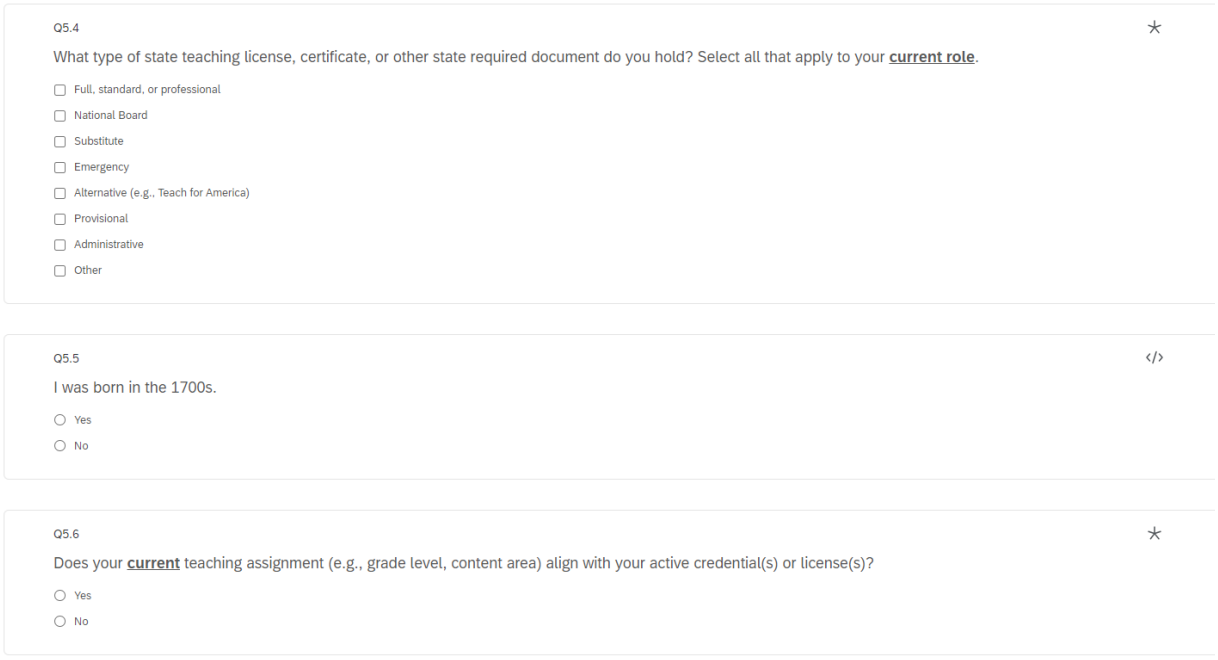
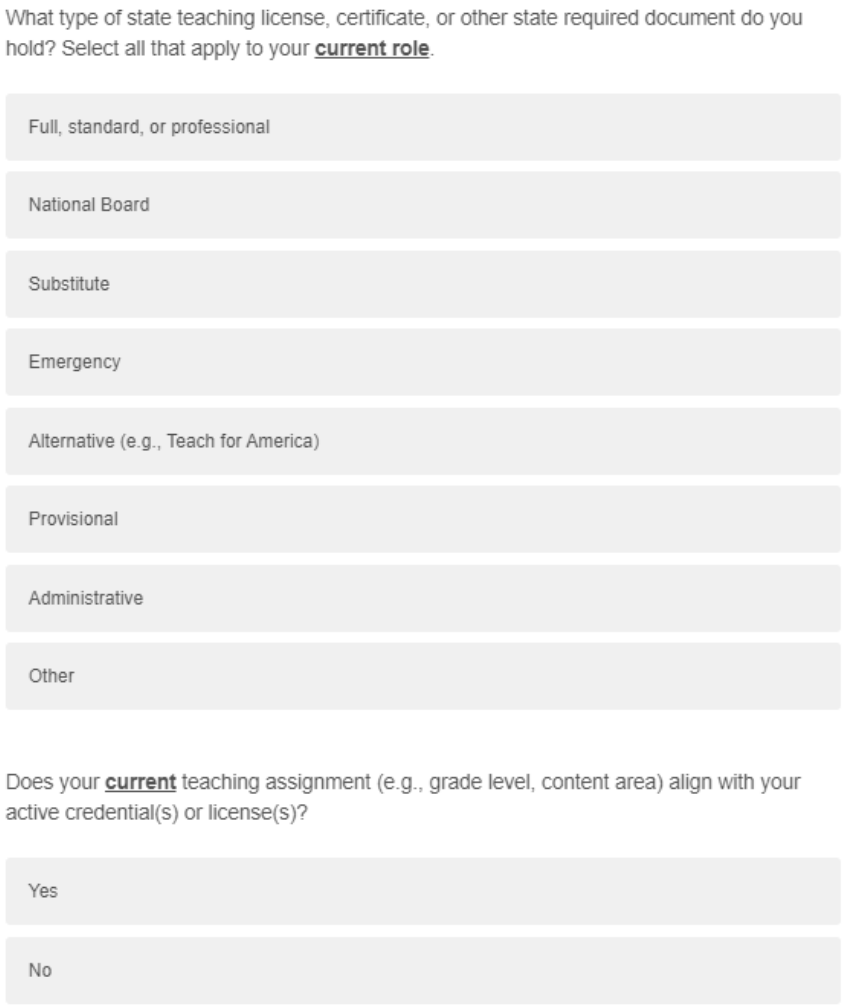


Figure 3. Survey Design: Screenshot of Hidden Item in Educator Survey (User Side)



3.2.3.C Qualtrics Settings

We also utilized the “bot detection” feature on the Qualtrics platform. When the “bot detection” feature is enabled, Qualtrics employs Google's invisible reCAPTCHA technology to calculate a score reflecting the likelihood that a user is human based on their interactions with the site (Qualtrics, 2024a). This score ranges from 0.0 (very likely a bot) to 1.0 (very likely a human; Google for Developers, n.d.). Based on Qualtrics guidelines (Qualtrics, 2024a), a reCAPTCHA score of 0.5 or higher suggests the respondent is likely a human, while a score below 0.5 suggests that the respondent might be a bot. We also utilized the “Prevent multiple submissions” feature in Qualtrics and collected information on respondents' Internet Protocol (IP) addresses and location information. In the following section, we explain how we used the respondents' IP addresses and location data to identify and eliminate both human and nonhuman bots from the survey data.

3.2.4 Testing on Qualtrics Platform

Lastly, we conducted extensive reviews and tests of the survey on the Qualtrics platform to evaluate its length, format, and accessibility. This included testing the survey across different digital devices (e.g., computer, laptop, phone, tablet) to ensure the survey items were displayed consistently across devices (Dillman et al., 2014) and to assess how device type might influence survey response and completion time. We also explored various functionalities and integrations to ensure the survey would be accessible to all participants (e.g., text-to-speech to read items and response categories, speech-to-text to record open-response answers). Though we explored integration with accessibility programs or apps, these features were not a part of the Qualtrics platform we used.

3.3 Cognitive Interviews

Once the Educator Survey items were fully drafted, WestEd conducted cognitive interviews to test the reliability and validity of the proposed survey items prior to survey administration. In addition to syntax and word choice to elicit the most candid responses, we were particularly interested in feedback on terms surrounding LD and intervention systems to address academic need (e.g., response to intervention, multi-tiered systems of support) due to the variety of state and district language around these areas.

Cognitive interviews are an evidence-based approach in survey methodology research for evaluating the reliability and validity of survey items and response options (Leighton, 2017; Messick, 1995; Padilla & Leighton, 2017; Willis & Artino, 2013) throughout the stages of survey development, piloting, and refinement. This method is considered best practice and is endorsed by organizations such as the American Educational Research Association (AERA), the American Psychological Association (APA), the National Council on Educational Measurement (1999), and the American Association for Public Opinion Research.

While taking a survey, respondents are theorized to move through a four-component cognitive process when reading and answering survey questions: understanding the question (comprehension), retrieving relevant information (retrieval), preparing one's answer (judgement), and formatting and editing an answer (response) (Bradburn, 2004; Ryan et al., 2012; Schwarz, 2007). Cognitive interviews are designed to support a more robust understanding of these processes than would be possible through survey results alone. In other words, cognitive interviews allow researchers to assess if the survey measures what they intend it to measure and assess if questions are interpreted by respondents as expected. This is accomplished by the interviewer asking respondents structured questions about their interpretation of and reaction to survey items as they answer the survey questions aloud during the cognitive interview (Messick, 1995; Ryan et al., 2012). Survey questions and response items are then revised based on feedback from the cognitive interview.

3.3.1 Methods

We employed two cognitive interviewing techniques: the think-aloud approach and verbal probing, with half of the cognitive interview participants assigned to each method. In both approaches, participants were first introduced to the purpose of the project and the survey. They then received instructions on how to engage in the think-aloud process through interviewer modeling using sample questions, followed by practice sessions until they felt comfortable with the procedure.

To guide these sessions, we developed two distinct protocols—one utilizing the think-aloud method and the other incorporating verbal probing (see Appendices A and B). Both protocols were informed by a review of relevant cognitive interviewing literature (Ryan et al., 2012; Tourangeau et al., 2000; Willis, 2004; Willis & Artino, 2013). In addition to the general questions included in each protocol, targeted verbal probes were integrated to address specific survey items previously identified by WestEd and NCLD as requiring further clarification, such as questions around certification types. Across both protocols, probes related to syntax and word choice were used to ensure that participant responses provided the most accurate and meaningful insights.

In the think-aloud condition, participants were instructed to read each survey question aloud, verbalize their thought process while selecting an answer, and articulate any reasoning behind their choice (Ryan et al., 2012; Tourangeau et al., 2000; Willis & Artino, 2013). Throughout the interview, we provided guidance on maintaining the think-aloud process, using prompts such as "keep talking" or "keep going" to encourage continuous narration. In addition to documenting participant responses and identifying questions that required clarification or rewording, we also recorded nonverbal cues such as sighs, pauses, and hesitations. These observations, along with initial impressions, were noted directly in a copy of the survey protocol during the interview for later analysis.

In the verbal probing condition, participants were not only encouraged to think aloud but were also asked targeted follow-up questions to explore their interpretations and reactions to the survey items (Ryan et al., 2012). These probes included questions about how particular items made them feel and how they might rephrase the question for greater clarity. The purpose of these probes was to gain deeper insights into the four key cognitive processes involved in survey response: comprehension, retrieval, judgment, and response formulation.

Each interview lasted between one hour and one and a half hours and was conducted via Zoom. After each cognitive interview, participants were thanked for their time and asked to complete a brief email feedback form. Follow-up questions included:

- How did it feel taking the survey?
- What did you think about the length?

- Are you more likely to respond to a survey you get an email about, see on social media, etc.?
- Are there things you think are missing?
- We want to understand the beliefs and experiences of educators who teach students with LD. Do you think we capture that?

Each participant received a $25.00 Amazon.com Gift Card for participating in the cognitive interviews.

3.3.2 Sample and Recruitment

Cognitive interview participants were sampled in alignment with the larger study's inclusion criteria.

In conjunction with NCLD, WestEd recruited six teachers to participate in cognitive interviews via email. Educators were recruited from WestEd's professional contacts. Educator participants needed to be current or recent (within a year) educators in K-12 settings within the United States and hold a valid teaching credential, license, or certificate. We purposefully recruited across professional experiences and included two general education teachers and four special education teachers.

3.3.3 Data Analysis

During each interview, data was collected in real-time using tracked changes and comment boxes in a shared Google Docs copy of the survey. Additionally, interview recordings were reviewed for further reflective analysis. Notes were taken on how respondents interpreted and answered questions, their mental and emotional reactions, and areas requiring further clarification. After all interviews were completed, notes from each session were aggregated into a single version of the survey in Google Docs for analysis. We then applied thematic analysis (Braun & Clarke, 2006) to systematically examine the notes and tracked changes, identifying common themes and areas for revision.

3.3.4 Findings

The cognitive interviews generated several key areas of revision related to survey item and response option syntax, semantics, and clarity. Table 5 provides examples of how the survey was altered based on feedback.

Table 5. Survey Design: Example Changes Following Cognitive Interviews

Revision Type	Original Item	Revised Item
Syntax and Semantics	Which of the following content area(s) do you currently hold?	What content area(s) do your license(s) currently apply to?
	Rate how effective each of the following is in supporting struggling students in the general education classroom. [Harmful, Not effective, Neutral, Somewhat effective, Very effective, I'm not familiar with this practice]	What is the potential benefit of the following practices in supporting struggling students in the general education classroom? [Not beneficial, Neutral, Somewhat beneficial, Beneficial, Very beneficial, I'm not familiar with this practice]
Editing for clarity	Modify instruction for individual student needs	Change instruction to meet individual student needs
	Have you provided direct instructional support to K-12 students identified with a learning disability in reading/English Language Arts, writing, or math in the past 2 years? ("Learning disability" is defined as "a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations")	A "Learning disability" is defined as "a disorder in 1 or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Have you provided direct instructional support to K-12 students identified with a learning disability in reading/English Language Arts, writing, or math in the past 2 years?

When discussing the survey as a whole, participants across both conditions reflected on several constructs they believed were missing or could be strengthened in the survey items and response options. In the educator cognitive interviews, participants suggested additional items related to personal preparation, internal coherence and follow-through, and elements of collaboration. The following items were added to the survey based on feedback from the cognitive interview participants.

Personal preparation

- I have adequate knowledge to teach students with and at risk for learning disabilities.
- I have adequate resources to teach students with and at risk for learning disabilities.
- I have adequate support to teach students with and at risk for learning disabilities.

- I have the time I need to use my knowledge, resources, and supports.
- I feel like I can advocate for myself.
- I feel like I can advocate for my students with learning disabilities.
- How relevant are each of the following in making instructional changes to meet the needs of students with or at risk for LD? [Not relevant at all, Undecided, Somewhat relevant, Relevant, Very relevant]
- Think about your role in preparation for an IEP meeting in the past year. Which best describes you? Select all that apply.
- Think about your role during IEP meetings in the past year. Which best describes you? Select all that apply.
- What is the potential benefit of the following practices in supporting struggling students in the general education classroom? [Not beneficial, Neutral, Somewhat beneficial, Beneficial, Very beneficial, I'm not familiar with this practice]
- Rate your level of comfort implementing each of the following practices. [Very uncomfortable, Somewhat uncomfortable, Undecided, Somewhat comfortable, Very comfortable, This is not part of my role]
- With appropriate supports, students with learning disabilities can progress at the same rate as their peers when in inclusion classrooms.

Internal coherence and follow-through

- My school's priorities are aligned with my district's expectations.
- My school leadership's actions match the policies we are supposed to implement.
- My school leadership helps me when I ask for it.
- My school leadership follows through to meet the needs of students with or at risk for learning disabilities.
- My school leadership has systems in place to support inclusion classrooms.

Elements of collaboration

- I got to choose to be in co-teaching.
- I got to choose to be an inclusion classroom.
- I am happy with the level of collaboration I have with my colleagues.
- What does it look like when you collaborate? Select all that apply.
- Who do you typically collaborate with? [General educators, Special educators, Transition specialist/vocational coordinator/transition-focus position, Academic

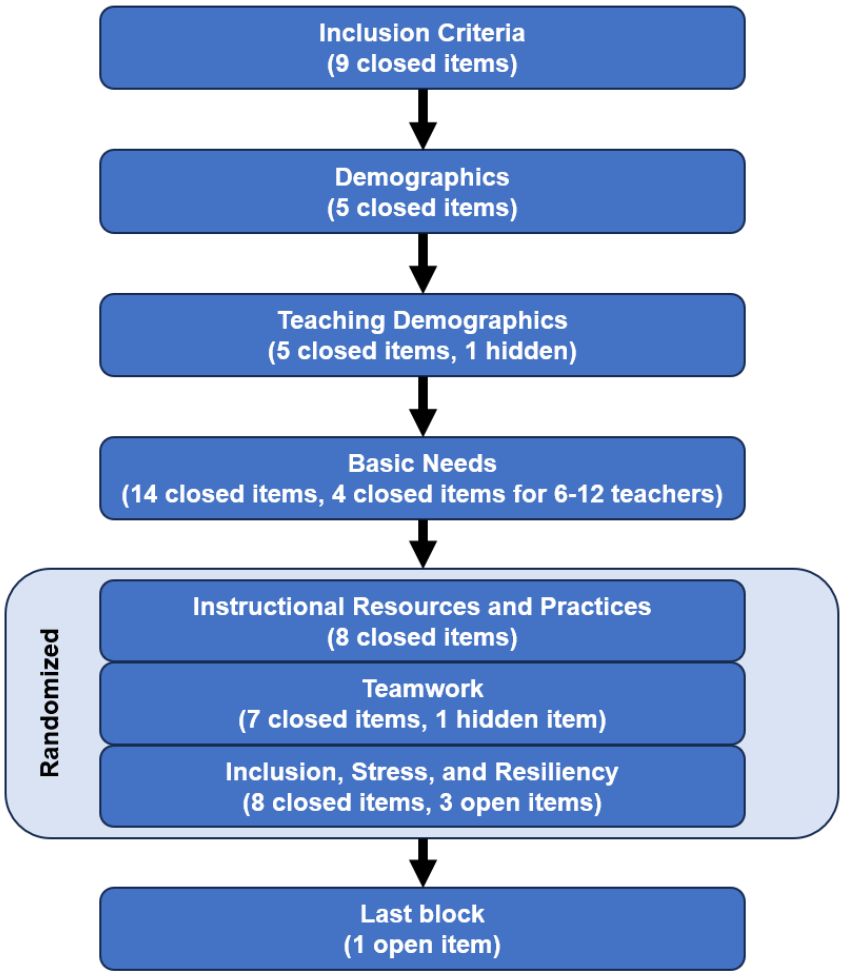
interventionist, Service provider (SLP, OT, PT, school psychologist, guidance counselor), N/A]

- How frequently do you engage in the following (collaborative) activities? [Daily, Weekly, Monthly, Quarterly, Yearly]
- How frequently do you collaborate with each of the following?
- In general, how beneficial is this collaboration? [Not beneficial, Neutral, Somewhat beneficial, Beneficial, Very beneficial]

3.4 Final Educator Survey

The final Educator Survey incorporated suggestions from the cognitive interviews and testing on the Qualtrics platform and totaled a minimum of 56 closed and 4 open-ended items (K-5 educators) and a maximum of 62 closed and 4 open-ended items (6-12 educators). The final Educator Survey, including the survey flow within Qualtrics, can be found on the Open Science Framework project page (Wong et al., 2025). Based on the survey block flow in Figure 4, all survey respondents received all survey blocks. However, due to concerns about survey length and respondent fatigue, we randomized the Instructional Resources and Practices; Teamwork; and Inclusion, Stress, and Resiliency blocks, meaning participants could receive these survey blocks in any order. Block randomization ensured we would collect data across all blocks in case respondents left the survey before completing all blocks. Finally, the Educator Survey was designed to allow respondents flexibility to exit the survey and return where they had left off. Survey respondents were marked incomplete if a week had elapsed since they last modified a survey response and the present date.

Figure 4. Survey Design: Survey Block Flow



4. Methods

Below we detail our method for recruitment, creation of the analytic sample, and procedures for examining the data.

4.1 Recruitment and Sampling Procedure

Our goal was to gather a sample that reflects the national educator population while balancing costs. To achieve this, we predominantly relied on digital platforms and the internet to recruit participants. The internet has become a popular low-cost option for gathering data (Storozuk et al., 2020) due, in part, because of the growing number of internet users: internet usage among U.S. adults rose from 52% in 2000 to approximately 93% in 2021 (Pew Research Center, 2021a). Moreover, the prevalence of internet-based surveys in published research has increased from 40 studies in 2007 to 255 in 2014 (Wu et al., 2022). Furthermore, online surveys offer a means of reaching populations that are otherwise difficult to engage (Storozuk et al., 2020). For example, Pew Research Center (2019; 2021b) found that 80% of U.S. adults use social media, with at least 60% usage across all sociodemographic groups.

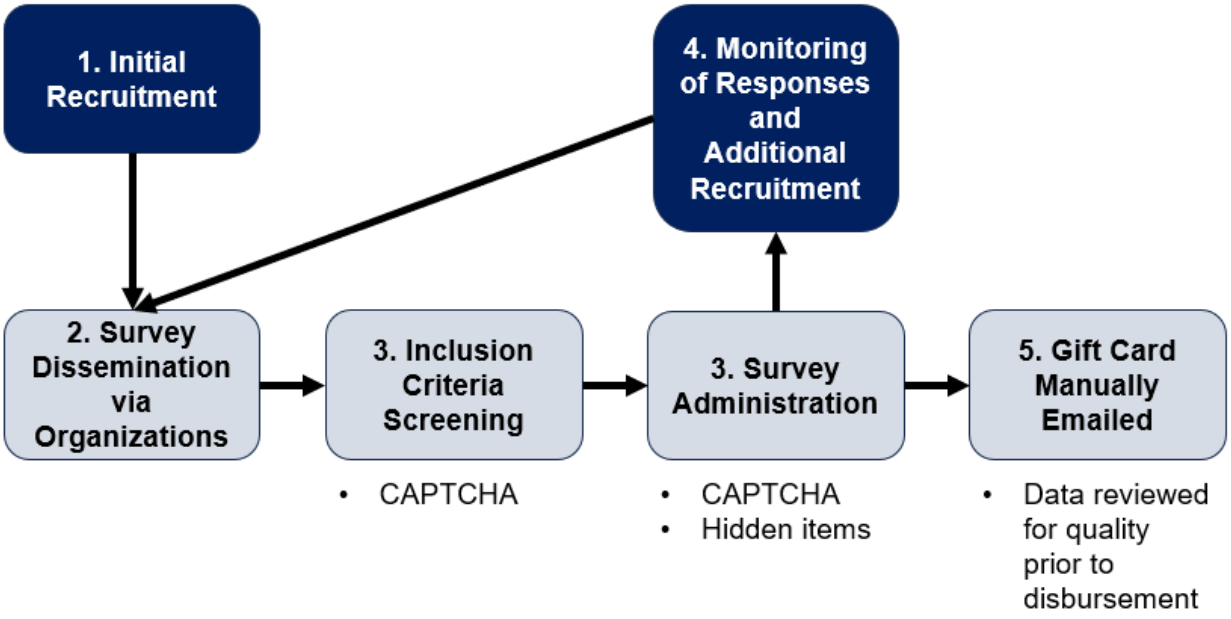
Our design aimed to address challenges associated with using social media for survey recruitment—such as the prevalence of bot responses and participation from individuals who do not meet the study requirements (Chandler & Paolacci, 2017; Yarrish et al., 2019)—by using river sampling. River sampling, which is also known as intercept or real-time sampling (Yun & Trumbo, 2000), is a widely used nonprobability sampling technique in the context of online research. This method involves placing a survey link on a website, within an email, or in another visible location to draw the intended sample's attention (Lehdonvirta et al., 2020). By using river sampling, researchers metaphorically "fish" from the continuous flow (river) of a site's users to capture a segment of those users for inclusion in the study.

By integrating social media platforms and river sampling techniques, we capitalized on the extensive networks of organizations that engage with our desired sample to disseminate our survey. Rather than utilizing conventional methods, such as targeted advertising campaigns on social media or pre-existing respondent pools (e.g., Amazon Mechanical Turk)—methods often plagued by issues like poor data quality and repeated submissions from bots or single individuals (Aruguete et al., 2019; Chandler et al., 2014)—we instead collaborated with specific organizations and requested that they share our survey link with their audience. For instance, instead of setting up a dedicated project page and promoting it through a Facebook advertisement aimed at users who fit our demographic criteria, we approached administrators of Facebook pages and groups that have a direct line to our target audience and asked them to post our survey on their respective pages.

Our recruitment procedure involved five steps (Figure 5) that will be explained in greater detail below:

1. Initial site recruitment
2. Survey dissemination via organizations
3. Inclusion criteria screening and survey administration
4. Monitoring of respondents and additional site recruitment
5. Disbursement of stipend

Figure 5. Survey Methods: Procedure for Participant Recruitment and Enrollment



4.1.1 Initial Site Recruitment

Initial site recruitment entailed a multipronged strategy to identify individuals who meet our study's eligibility requirements. We first developed a list of organizations, community-service providers (e.g., advocacy groups, teachers' unions), and other projects NCLD and/or WestEd have pre-existing relationships with that have connections with our target sample group. Then, we reached out to these entities to gauge their interest in distributing our survey. Table 6 presents the list of organizations that were directly approached by either WestEd or NCLD during this initial recruitment stage. It is important to note that this list only includes those organizations we directly contacted, and it may not encompass all groups that were informed about the survey, as word-of-mouth may have snowballed where other organizations heard

about the survey and shared it with their user base. For example, WestEd posted about the survey on Twitter/X, which might have prompted individuals who viewed the post to relay the survey details to other individuals or organizations.

Since river sampling may be susceptible to coverage bias due to the digital divide (e.g., unequal access to the internet across different populations; Lythreatis et al., 2022), we deliberately created an expansive initial recruitment list. Our aim was to encompass a variety of channels to ensure extensive outreach to prospective participants. For instance, we incorporated a variety of organizations that interact with teachers, including teachers' unions, or school administrators.

Table 6. Survey Methods: Site Recruitment—First Wave

Organization	Description
NCLD Professional Advisory Board	NCLD's Professional Advisory Board (PAB) is a group of subject-matter experts and professionals that guide the development and execution of NCLD's mission, vision, and strategic plan. PAB members include university professors, school district superintendents, and school principals.
NCLD social media	Social media (i.e., Twitter/X, LinkedIn, Facebook) pages run by NCLD
WestEd social media	Social media (i.e., Twitter/X, LinkedIn, Facebook) pages run by WestEd
SPED Pro	Social media site primarily for special education researchers
National Association of State Directors of Teacher Education and Certification	Organization whose mission focuses on ensuring the effective selection, preparation, licensure, and professional development of educators
Teach Plus	Organization that works to address the growing need for authentic teacher leadership to transform the nation's schools and education system
National Board for Professional Teaching Standards	Independent, nonprofit organization that works to advance accomplished teaching for all students
Educators4Excellence	Organization that works to ensure teachers have a leading voice in the policies that impact their students and profession

Organization	Description
Northwest Area Education Agency	Agency in Iowa that partners with public school districts to provide school improvement services
Literacy How	Nonprofit organization that provides professional development, classroom support, and coaching to current and pre-service teachers about evidence-based practices for teaching reading.
Facebook Group—University of Florida Literacy Institute	Facebook group for the University of Florida Literacy Institute
Teachers' Unions for each U.S. state	State-level organizations that advocate for the well-being of teachers and the quality of public education
Heritage University (Washington state)	Postsecondary institution that has a teacher preparation program
University of Massachusetts–Boston	Postsecondary institution that has a teacher preparation program
University of Vermont	Postsecondary institution that has a teacher preparation program
University of Virginia	Postsecondary institution that has a teacher preparation program
University of Wisconsin–La Crosse	Postsecondary institution that has a teacher preparation program
Salt Center	Disability resource center at the University of Arizona
Inclusion Collaborative State Conference	Annual conference hosted by the Santa Clara County Office of Education that provides professional development focused on creating and enhancing equity, diversity, and inclusive practices
Midwest Symposium for Leadership in Behavior Disorders Conference	Annual conference hosted by the Midwest Symposium for Leadership in Behavior Disorders that provides information and support focused on effective education and behavior change
Alachua County, FL Principals	School district in Alachua County, Florida
Wood County Special Education SSA	Agency in Texas that partners with public school districts to provide special education services

4.1.2 Survey Dissemination via Organizations

Organizations that agreed to disseminate the survey were provided with a Social Media Toolkit designed to communicate the survey to their respective audiences. The Social Media Toolkit (see Appendix C) included flyers, a pre-written email intended for direct distribution to potential respondents, a draft blurb for inclusion in emails or newsletters, and drafted social media posts for Facebook, Twitter/X, and LinkedIn as well as social media cards/images. Each piece of content in the Social Media Toolkit provided an overview of our study and a link to the survey. To protect the survey from bot submissions, only the pre-composed email and email/newsletter snippet contained more detailed information about the survey, as these methods allowed for direct engagement with potential respondents. Based on insights from previous survey research that used comparable recruitment strategies (e.g., Arigo et al., 2018; Carter-Harris, 2016), we deliberately omitted specific eligibility criteria from the social media posts to minimize the risk of attracting fraudulent or unqualified participants who did not meet our study's inclusion criteria.

Additionally, to monitor and track our recruitment strategies, we created unique survey links for each method of outreach. In Qualtrics, this is implemented by adding embedded data field names to the anonymous survey link (Qualtrics Digital Success, 2024). We added an embedded data field for “source” to the anonymous survey link and set values to specific recruitment avenues such as “email”, “facebook”, “flyer”, “LinkedIn”, “Twitter/X”, and “conference” (see Figure 6). In some cases, we provided specific links to organizations that directly interact with K-12 educators where the “source” was set to the name or abbreviation of a specific educator organization. Additionally, the survey incentive form encouraged survey participants to share the survey with any friends or colleagues and provided a survey link with the “source” set to “snow” to track snowball sampling.

This approach enabled us to analyze the response patterns and assess the quality of the data collected (e.g., whether there was a higher response rate from emails or a specific social media outlet), and the quality of responses (e.g., whether Facebook or Twitter/X had more bot-generated responses). Each recruitment avenue included an associated link. For example, the drafted email message included the survey link where “source=email” was added, which could be accessed by numerous individuals. Additionally, if the “source” embedded data field was empty for any survey respondent, their recruitment source was recorded as “blank”.

Figure 6. Survey Methods: Example Educator Survey Links with Embedded Data Fields

https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=facebook
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=twitter
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=linkedin
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=email
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=snow
https://westedk12enterprise.co1.qualtrics.com/jfe/form/SV_8cYRlhf5TQS9qWa?source=flyer

***Note*. The survey link in the first row was used to indicate a blank recruitment source.**

4.1.3 Inclusion Criteria Screening and Survey Administration

Once survey respondents consented to participate in the study, they first answered questions in the inclusion criteria screening block to verify their eligibility. Respondents who satisfied the criteria were able to proceed directly to the survey. Respondents who did not meet the criteria were thanked for their interest and directed to the end of the survey.

We changed this process after one month of survey administration. Survey responses collected from January 8, 2024, 12 a.m., to February 5, 2024, 12 p.m., exhibited (1) an unusually high number of responses within short timeframes (e.g., receiving hundreds of responses in just a few hours; Pozzar et al., 2020), and (2) a prevalence of fraudulent and suspicious response patterns (described below). To mitigate and potentially reduce access by automated bots or bad actors, we implemented a delayed or two-stage access approach where we split the survey into two parts: (1) an interest form and (2) the main survey. The interest form briefly described the study and requested those willing to participate to provide their email address. One hour later, a survey link was sent to the email address provided. Although typical waiting periods before gaining access to a survey can be longer (e.g., 24 hours), we chose a shorter delay to avoid deterring genuine participants. We adopted this revised two-stage survey structure starting from February 16, 2024, 12 a.m., and continued using it until December 11, 2024, 12:30 p.m. when we focused our recruitment efforts on direct email outreach.

The final stretch of survey administration (December 11, 2024, 12:31 p.m. until December 17, 2024, 5:00 p.m.) focused entirely on direct email outreach using publicly available teacher emails from states with zero educators in the final sample. This strategy allowed us to target recruitment to ensure some representation from every U.S. state. Educators contacted in this final stage had instant access to the survey and did not need to wait one hour to receive the survey link.

4.1.4 Monitoring of Responses and Additional Site Recruitment

Monitoring survey respondents included regular checks of the responses gathered via Qualtrics. These inspections served three primary purposes: (1) tracking the data collection progress (e.g., number of respondents by target group or demographic); (2) assessing the integrity of the data (e.g., fraudulent or suspicious survey responses); and (3) detecting any issues with how the survey was administered (e.g., whether respondents could properly engage with open-ended questions; whether a significant drop-off rate occurred at certain points in the survey; Dillman et al., 2014). Because nonresponse can introduce bias or systematic differences in survey results (Dillman et al., 2014), we used nonresponse rates to examine trends among different subgroups, including demographics, item type, and topic or subtopic area.

Additionally, because we aimed to approximate a nationally representative sample based on selected characteristics, we continuously reviewed survey responses to tailor our recruitment strategies towards demographic groups that were underrepresented. We used additional recruitment waves to bolster participation among these less responsive groups (see Table 7). The organizations, institutions, and strategies included in additional recruitment waves were selected based on their potential to reach demographic subgroups with low participation rates. For instance, contacts at higher education institutions were chosen in states where response rates were notably low. Furthermore, we included broad strategies to encourage participation, including in-person conferences and collecting publicly available teacher emails in states or U.S. Census divisions where we had low recruitment of individuals.

Table 7. Survey Methods: Site Recruitment—Second Wave

Organization	Description
Florida	Publicly available teacher emails from district and school websites
Illinois	Publicly available teacher emails from district and school websites
Mississippi	Publicly available teacher emails from district and school websites
Nevada	Publicly available teacher emails from district and school websites
New Hampshire	Publicly available teacher emails from district and school websites
North Dakota	Publicly available teacher emails from district and school websites

Organization	Description
Oregon	Publicly available teacher emails from district and school websites
Rhode Island	Publicly available teacher emails from district and school websites
West Virginia	Publicly available teacher emails from district and school websites
National Education Association	Organization that advocates for education professionals
Teach for America	Organization that develops and supports leaders to transform education
Relay Graduate School of Education	Private graduate school for teachers
National Science Teaching Association	Organization committed to best practices in teaching science
National Council of Teachers of Mathematics	Organization that advocates for high-quality mathematics teaching and learning
National Council for the Social Studies	Organization that engages and supports educators in strengthening and advocating social studies
National Association of Secondary School Principals	Organization for middle level and high school principals, assistant principals, and other school leaders
National Center for Education and the Economy	Organization that supports education leaders and practitioners
National Association of Elementary Principals	Organization serving elementary and middle school principals
Council for Exceptional Children	Professional organization dedicated to improving the success of children and youth with disabilities
Council of Chief State School Officers	Nonpartisan, nonprofit organization of public officials who head departments of elementary and secondary education, including Department of Defense and Bureau of Indian Education jurisdictions

Organization	Description
The School Superintendents Association	Professional community of education leaders
American Federation of Teachers	Union of education professionals
2TeachGlobal	Educational consulting company
Institute for Excellence in Writing	Organization that works to help students become confident and competent communicators and thinkers

4.1.5 Response Rate

We calculated two response rates. The first was calculated by dividing the number of survey respondents who satisfied the inclusion requirements by the number of survey respondents who finished the inclusion criteria block. This calculation is often referred to as the eligibility rate (American Association for Public Opinion Research [AAPOR], 2016). We opted for this method of calculating response rate (over the conventional method of dividing the number of individuals who completed the survey by the total number of people sampled; Valliant et al., 2018) for two key reasons.

First, when using river sampling or real-time sampling methods (e.g., nonprobability sampling), it is not feasible to know the total number of survey invitees asked to take the survey (AAPOR, 2016). In the context of online surveys, especially those disseminated through social media, it is nearly impossible to determine how many people who meet the sampling criteria visited the recruitment site or engaged with the recruitment efforts but did not participate in the survey.

Second, because river sampling taps into the ongoing flow of a website's users, it is likely to capture individuals who don't necessarily match the targeted sample population. Our recruitment channels for the Educator Survey, which included state and national organizations, institutes of higher education, and parent advocacy groups, reached individuals who did not necessarily meet our sample's specific criteria. For instance, not everyone who graduated from a postsecondary teacher preparation program may be teaching. If we had used a sampling frame, these individuals would not have been eligible to take the survey since they would not align with the predetermined sample frame criteria. Therefore, calculating the response rate as the ratio of participants who met the inclusion criteria to those who completed the eligibility screening provides a more accurate measure of the actual response rate.

The second response rate was calculated as the proportion of the sample unit with successful initial contact (Valliant et al., 2018). Often referred to as a contact rate, this type of response

rate captures success in contacting potential participants and is typically calculated as the number of participants who were successfully contacted divided by the total number of eligible sample units (Valliant et al., 2018).

We only calculated a contact rate for our email recruitment method. In this recruitment strategy, we collected publicly available K-12 educator emails from specific school districts or states, then directly emailed these potential participants through Qualtrics. Once an email is sent through the Qualtrics survey platform, each email receives a distribution status. We then determined how "successful contact" should be defined by categorizing these statuses into whether the count should be included in the contact rate as (1) ineligible and excluded from the calculation, (2) successful contact and included in the numerator and denominator or (3) eligible sample unit and included in the denominator (see Table 8).

Table 8. Survey Methods: Contact Rate—Qualtrics Email Distribution Statuses

Email Status	Qualtrics Definition	Categorization
Email Sent	The email left the Qualtrics server.	Eligible Sample Unit – included in denominator
Email Failed	The email did not leave the Qualtrics server. This is sometimes due to a formatting issue in the email address (e.g., missing the @ symbol).	Ineligible – excluded from calculation
Email Blocked	The email did not leave the Qualtrics server. This is sometimes due to duplicate email addresses.	Ineligible – excluded from calculation
Email Hard Bounce	The email did not reach the recipient's inbox due to a permanent reason (e.g., email address does not exist, recipient server is not accepting emails)	Ineligible – excluded from calculation
Email Opened	The email reached the recipient's inbox.	Successful Contact – included in numerator and denominator
Survey Started	The recipient clicked on the survey link within the email from Qualtrics and did not finish the survey.	Successful Contact – included in numerator and denominator
Survey Finished	The recipient clicked on the survey link within the email from Qualtrics and completed the survey.	Successful Contact – included in numerator and denominator

Email Status	Qualtrics Definition	Categorization
Session Expired	The recipient started the survey but did not finish within the survey window.	Successful Contact – included in numerator and denominator

Note. Qualtrics (2025b).

4.1.6 Disbursement of Stipend

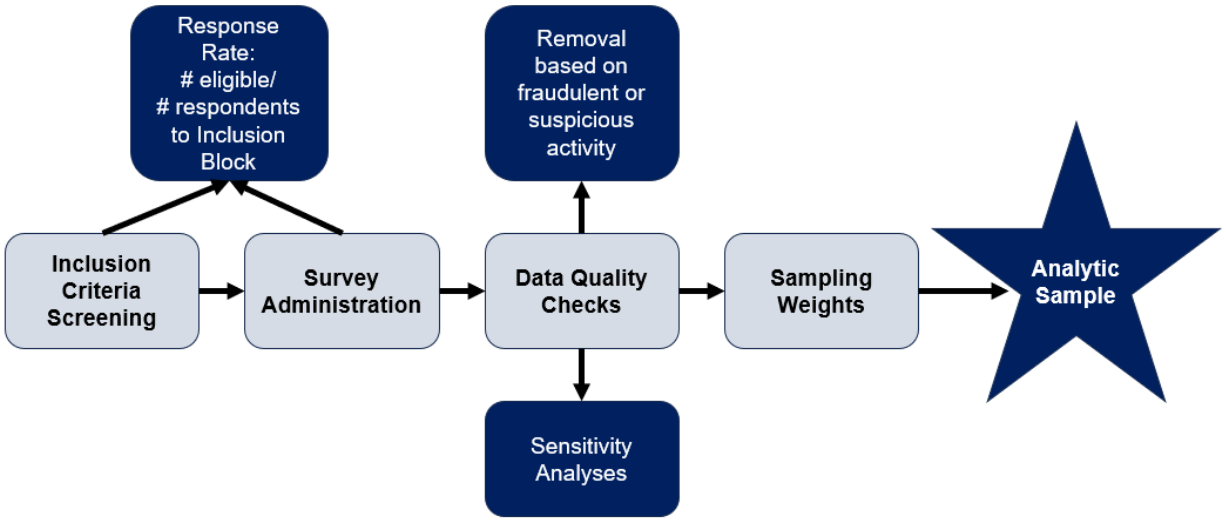
We used a monetary stipend to encourage participation broadly and from target groups of interest specifically. Given concerns about the length of the survey, the goal of obtaining a nationally representative sample based on certain characteristics, and the challenge of engaging hard-to-reach demographics, educators who completed the survey were rewarded with a $10.00 Amazon.com Gift Card. However, eligibility for the incentive was contingent upon data quality from the completed surveys to preserve the integrity of the survey (Eckerd et al., 2021). Furthermore, the reward was restricted to a single gift card for each participant. Research involving comparable participant groups has shown positive results when incentives are used. For instance, one study found the use of a $10 incentive prior to survey administration outperformed larger incentives (up to $60; Robbins & Hawes-Dawson, 2020).

After finishing the survey, participants were directed to a separate form to provide their first name, last name, and email address. This personal contact information was stored separately from their survey responses and only used to contact participants regarding the incentive. The stipend form and the survey were distinct Qualtrics surveys; no personal contact details were gathered within the Educator Survey itself. Instead, we utilized the ResponseID in Qualtrics, a unique alphanumeric string assigned to each survey response (Qualtrics, 2024b), to link responses from the survey and stipend contact form. We used embedded data to “pull” the ResponseID from the survey into the stipend form. This procedure ensured that if a survey response was identified as fraudulent and needed to be excluded from the sample, the corresponding contact information for the stipend could also be removed.

4.2 Construction of the Analytic Sample

Constructing the analytic sample followed the process outlined in Figure 7. We first performed data quality checks to detect, identify, and exclude participants that met fraudulent or suspicious criteria. Then, we applied weights to approximate a nationally representative sample based on selected characteristics.

Figure 7. Survey Methods: Procedure for Construction of the Analytic Sample



4.2.1 Data Quality Checks and Removal Decisions

We implemented regular data quality assessments to monitor and identify any survey responses that meet our fraudulent or suspicious criteria due to known issues of both human and nonhuman bots participating in online surveys (Al-Fannah, 2017; Chandler & Paolacci, 2017; Prince et al., 2012). Responses considered suspicious were those that might have been caused by error or coincidence (e.g., typos, intentional nonanswers). Fraudulent responses, on the other hand, were those that appeared to be the result of automation or respondent misrepresentation (Pozzar et al., 2020). An overview of each criterion used to flag a response as either fraudulent or suspicious is provided in Table 9, and in-depth explanations are provided below.

Table 9. Survey Methods: Fraudulent and Suspicious Criteria

Indicator	Designation
Evidence of inattention	
Survey completion time < 5 minutes	Fraudulent
Duplicate or unusual response to open-ended items	

Indicator	Designation
Response to open-ended item provided in a language other than English	Fraudulent
Exact response (1) across all open-ended items or (2) of more than three words to any open-ended item	Fraudulent
Response is obviously irrelevant to item	Fraudulent
Response is a nonanswer	Suspicious
Inconsistent responses to verifiable items	
Reported IP address is outside of the United States	Fraudulent
Evidence of bot automation or bad actors	
Response provided to one or more hidden items	Fraudulent
Multiple survey responses from the same IP address	Fraudulent
Embedded survey data for recruitment source does not align with valid options	Fraudulent
reCAPTCHA score less than 0.5	Fraudulent
Multiple incentive submissions from the same survey ResponseID	Fraudulent
No matching survey ResponseID across survey and incentive form	Fraudulent
Duplicate email addresses on the incentive form	Fraudulent
Amazon.com Gift Card undeliverable due to invalid email address	Fraudulent
Duplicate email address on Young Adult and Educator incentive forms	Fraudulent
Duplicate IP address on Young Adult and Educator Surveys	Fraudulent

4.2.1.A Evidence of Inattention

We included one fraudulent indicator under Evidence of Inattention. This criterion centered on the total time taken to complete the survey. Although some researchers (e.g., Teitcher et al., 2015) suggest using cutoffs that are two standard deviations above or below the mean completion time, the Educator Survey primarily consisted of multiple-choice questions that, as indicated by cognitive interviews, did not require extensive cognitive effort or time to respond to. Therefore, any survey completion times under 5 minutes (or 300 seconds) were deemed fraudulent.

4.2.1.B Duplicate or Unusual Response to Open–Ended Items

The criteria for Duplicate or Unusual Response to Open-Ended Items were specifically aimed at the open-ended questions within the survey. They encompassed indicators for fraudulent or suspicious activity, which included: (1) a response in a language other than English, (2) an identical response for all open-ended questions or a repeated phrase of more than three words for any open-ended question, (3) a response that was clearly not related to the question, and (4) a response that was a nonanswer. These indicators, further described below, were applied to the four open-ended items included in the Educator Survey:

1. How would you define an ideal inclusion model? (Q9.2)
2. What does your school's inclusion model look like? (Q9.3)
3. In this question, we define resilience as "the ability to withstand and quickly recover from adverse job-related conditions". In general, what factors help you be resilient when addressing the academic needs of students with and at risk for learning disabilities? Please use words or phrases. (Q9.9)
4. Is there anything else you think we should know about your needs in teaching students with learning disabilities? (Q10.1)

Survey respondents were required to answer each open-ended item. However, respondents were allowed to proceed as long as their response to the open-ended item consisted of at least two characters. For instance, a participant could simply input any pair of characters (e.g., no, na, ew, bs, or po) to move on to the next item in the survey.

Additionally, when evaluating the final set of data, these criteria were also applied to items that featured a write-in option, such as an "Other" category accompanied by a textbox for typing in an answer.

Response provided in a language other than English

This metric involved reviewing each open-ended response to determine whether the response was in English as the survey required responses in English. Survey respondents were flagged as fraudulent if a response to an open-ended item was provided either entirely or partially in a

language other than English. We utilized the cld2 (Ooms, 2022), cld3 (Ooms, 2023), and textcat (Hornik et al., 2013) packages in R to examine responses. The cld2 package uses at least 200 characters to probabilistically detect more than 80 languages. The *detect language* function from the cld2 package returns the three likely languages detected or NA (not available) if the language cannot reliably be determined. The cld3 package, which is still in its experimental phase, uses a neural network model to identify languages and functions similarly to cld2 in terms of output. The textcat package compares the input text to established language profiles to identify the language and returns the detected language.

Each package is designed to detect the language of the provided text. Due to differences in how each package detects language (i.e., neural network model vs. Bayesian), we used all three to determine the language of the survey responses. Open responses where all three packages identified the language as English automatically passed this indicator; all other responses were manually inspected. This process allowed us to affirmatively identify whether responses marked as not English should be considered fraudulent and excluded from the survey sample.

Exact response across all open-ended items or exact response of more than three words to any open-ended item

First, we marked responses as fraudulent if multiple respondents provided identical responses across all open-response items. Although it is possible for different individuals to give exactly the same answers to all four open-response items, it is highly unlikely there would be no variations in spelling, spacing, or capitalization. Therefore, respondents who submitted identical responses for all four open-ended items were flagged as fraudulent. This criterion did not apply to non-responses, such as when several respondents simply answered "No" to all open-ended items. To examine this criterion in R, we concatenated the responses from all four open-response items into a string variable. We then examined strings that occurred across more than one respondent. For instance, 29 respondents submitted the identical string: “10,;10,;Education without discrimination,;Education without discrimination,;Individualized learning plan,;Diversified teaching strategies,;Personal support and coaching,;Types of learning disabilities: Learning disabilities encompass a wide range of conditions, including reading disabilities (such as dyslexia), writing disabilities, math disabilities, language disorders, attention deficit/hyperactivity disorder (ADHD), and autism spectrum disorders. Understanding the specific type of learning disability a student has can help you better understand their difficulties and needs,” and all 29 were flagged as fraudulent and removed from the sample.

Next, we flagged responses as fraudulent if multiple participants utilized the same string of more than three words to any open-ended item. Items Q9.2 (How would you define an ideal inclusion model?), Q9.3 (What does your school’s inclusion model look like?), and Q10.1 (Is there anything else you think we should know about your needs in teaching students with learning disabilities?) followed the same structure in that a text box was provided to respondents. These responses were left as-is and examined for phrases of more than three words that were used across multiple participants. For example, 88 survey respondents used

"The ideal model of inclusivity in the United States is one that promotes equal opportunities, respects diversity, and fosters a sense of belonging for all individuals, regardless of their background, race, ethnicity, gender, sexual orientation, religion, or ability. This model strives to create a society where everyone feels valued, accepted, and empowered to participate fully in all aspects of life." when asked how they would define an ideal inclusion model, and all 88 respondents were flagged as fraudulent and removed from the sample. Similar to the above, we find it highly unlikely that multiple respondents would provide the same string of more than three words with no variation in spelling, spacing, or capitalization.

Item Q9.9 (What factors help you be resilient when addressing the academic needs of students with and at risk for learning disabilities?) provided three separate text fields for respondents to list each factor. To apply this fraud indicator to item Q9.9, the text from box 1, box 2, and box 3 were pasted into a string variable in R. Participants who listed the same three factors that totaled to more than three words were flagged as fraudulent and removed from the sample. For instance, 422 respondents entered "Individualized learning plan;Diversified teaching strategies;Personal support and coaching" without any variations in spelling, spacing, or order, and all were marked as fraudulent and removed from the sample. Within this item, we allowed exceptions for nonresponses such as "No, No, No" or other variants like "NA, NA, NA", "yes, yes, yes" that indicated the respondent did not want to provide an answer.

Lastly, given the tendency for online surveys to attract human or nonhuman bots, we were vigilant about the possibility of survey participants employing ChatGPT or other AI and machine learning tools to complete the survey. Notably, ChatGPT often produces responses in a distinctive pattern, where a noun or phrase is succeeded by a colon (for example, "Resilience and Persistence: Success often necessitates overcoming obstacles and enduring hardships."). Any responses to open-ended questions that exhibited this structure were designated as fraudulent for this criterion, regardless of the length of the response. Additionally, any response that contained the title of chat bot (e.g., "ChatGPT", "Gemini") was also removed.

Response obviously irrelevant to item

For this indicator, survey respondents were flagged as fraudulent if they provided answers to open-ended items that were obviously unrelated to the survey item. For example, a survey respondent entered "It promotes inclusive disaster preparedness and response strategies" when asked how they would define an ideal inclusion model. Similar to other criteria in this section, responses that were nonanswers (e.g., NA) were not marked as fraudulent.

Response that is a nonanswer

Responses were flagged as suspicious when a nonanswer was provided. For example, if a respondent entered a random sequence of characters (e.g., "dwsdw") instead of answering the open-ended item, this respondent would be flagged as suspicious but remain in the sample. We left suspicious responses in the sample for two reasons. First, the Educator Survey was relatively long at 68 items and may be mentally taxing to complete, especially when answering

the four open-response items. Second, all items required a response where open-ended items required at least two characters in order to continue to the next item. We did not want to unnecessarily remove survey respondents who did not want to provide a detailed open-response answer. Given these factors, we flagged survey respondents who utilized nonanswers as suspicious and retained them in the sample.

4.2.1.C Inconsistent Responses to Verifiable Items

We included one criterion in this section. Because participants must meet our inclusion criteria to be included in the sample, including currently residing in the United States, we used respondents' IP addresses as well as longitude and latitude to approximate their geographic location. Survey participants whose locations were identified outside the United States were considered to be fraudulent and were excluded from our sample. Though participants within the United States may have used virtual private networks (VPNs) to mask their actual IP addresses and conceal their true locations, we decided to apply this indicator due to our widespread recruitment efforts over social media.

4.2.1.D Evidence of Bot Automation or Bad Actors

We included multiple measures designed to detect both human and nonhuman bots. Some indicators were specific to responses to the Educator Survey while others were used to evaluate responses collected from both the Young Adult Survey and Educator Survey.

Response provided to a hidden item

Survey respondents were removed from the sample and flagged as fraudulent if they provided a response to a hidden item.

Multiple survey responses from the same IP address

Survey responses that contained same IP address were flagged as fraudulent. While it is possible that different individuals might use the same computer to participate in the survey (e.g., educators at the same school using the same computer or device to take the survey), there is also a chance that one person could be making multiple submissions to receive multiple incentives. Therefore, we marked all entries with duplicate IP addresses as fraudulent and removed them from the sample. We note here that survey settings that (1) allowed respondents to exit and return to complete the survey at a later time and (2) marked surveys as incomplete once a week had passed without any activity would not result in duplicate IP addresses from a single survey respondent completing the survey over time.

Additionally, we deviated from this process in one instance. One recruitment method was to utilize publicly available teacher emails from district, county, or school web pages. Since we often gathered teacher emails from the same school and public IP addresses collected by Qualtrics can be inexact (e.g., different devices on the same network reporting the same IP

address; Qualtrics, 2025a; Qualtrics Community, 2025), we did not apply this indicator to survey respondents that were recruited using their publicly available teacher email.

Embedded survey data for "source" does not align with valid options

Survey respondents were flagged as fraudulent and removed if the embedded data collected from the "source" field in the survey link did not correspond with the values we set. Values included recruitment avenues such as "facebook", "email", and "twitter", and survey respondents with embedded data that did not match these values were flagged as fraudulent and removed. For example, "email" and "facebook" were embedded data elements we created, but "email…" was not, so respondents with "email…" were flagged as fraudulent and removed from the sample.

reCAPTCHA score less than 0.5

We incorporated one indicator derived from reCAPTCHA scores. In Qualtrics, a reCAPTCHA score that is 0.5 or higher indicates the respondent is likely a human, while a score less than 0.5 indicates the respondent is a bot (Qualtrics, 2024a). Survey respondents with reCAPTCHA scores less than 0.5 were flagged as fraudulent and removed from the sample.

Multiple incentive submissions from the same survey response ID

This criterion utilized the survey response identifier (ResponseID) on the incentive contact form. The incentive form was designed to capture the survey response identifier from the Educator Survey to link responses from the survey and incentive form. Survey respondents were flagged as fraudulent and removed from the sample if the survey response identifier from the Educator Survey was recorded multiple times on the incentive contact form.

No matching survey response ID across survey and incentive form

This indicator also utilized the survey response identifier on the incentive contact form. Because the inventive contact form automatically collected the survey response identifier from the Educator Survey, the same survey response identifier would appear on both the Educator Survey and the associated incentive contact form. Therefore, survey respondents were flagged as fraudulent and removed if there was not a matching survey response identifier across the Educator Survey and incentive contact form.

Duplicate email addresses on the incentive form

The presence of repeated email addresses on the stipend contact form served as an indicator of fraud, as duplicate email addresses (even in the presence of unique survey identifiers) indicated that a single individual might be trying to claim multiple incentives from the survey.

Amazon.com Gift Card undeliverable due to invalid email address

Survey responses were flagged as fraudulent and removed if the email with the gift card stipend was undeliverable or bounced back.

Duplicate email address on the Young Adult Survey and Educator Survey incentive forms

The Young Adult Survey and the Educator Survey were concurrently collecting responses. Because we utilized some of the same organizations to recruit participants for both surveys (e.g., WestEd social media posted about the Young Adult Survey and the Educator Survey), we were concerned about the possibility of human and nonhuman bots completing both surveys to claim two stipends, amounting to $30 in Amazon.com Gift Cards ($10 for the Educator Survey and $20 for the Young Adult Survey). Although it was possible for young adults between the ages of 18–24 with LD to also be K–12 educators teaching students with LD, the potential risk of including numerous human and nonhuman bot responses in both survey samples outweighed the potential benefit.

Consequently, any survey submissions that used the same email address on the stipend forms for the Young Adult Survey and Educator Survey were considered fraudulent and excluded from the final data set.

Duplicate IP address on the Young Adult Survey and the Educator Survey

Similar to the previous criterion, survey responses were flagged as fraudulent and removed from the sample if duplicate IP addresses appeared in both the Young Adult Survey and Educator Survey metadata.

4.2.1.E Removal Decisions

In line with best practices for data integrity and transparency (Buchanan & Scofield, 2018; Pozzar et al., 2020), before conducting the survey we set forth *a priori* criteria for when a survey response would be removed from the survey sample. Survey responses that met any of the fraudulent criteria were removed from the survey sample and participants did not receive stipends.

Survey responses that exhibited one suspicious criterion were flagged as suspicious and included in the sample. Survey responses that did not demonstrate any fraudulent or suspicious activity were considered legitimate. Lastly, surveys that were not fully completed by the end of the survey administration period were excluded from analysis.

When applying the fraudulent and suspicious criteria, we documented which survey respondents were removed under which criteria (see “Results” section below).

4.2.2 Missing Data

Every question on the survey required a response. Additionally, during data analysis, nonanswers to open-ended questions (e.g., NA, No) were removed prior to thematic coding (see below) and Likert scale options where “Not applicable” was selected were excluded from descriptives. For instance, we used a 5-point Likert scale where “Not applicable” is one of the

options. In cleaning the data, “Not applicable” was not assigned a numeric value and was excluded from calculating the mean and standard deviation.

4.2.3 Weighting

Before conducting data analyses, we applied weights to the survey data to achieve a nationally representative sample based on role (general educator vs. special educator), gender, race/ethnicity, highest level of education obtained, and geographic location based on U.S. Census division. Weighting is a technique in survey methods that can be used to adjust a survey sample for unrepresentativeness and/or nonresponse bias (Valliant & Dever, 2018), which is particularly useful when nonprobability sampling methods are used (Caughey et al., 2020). Without weighting, population-level conclusions drawn from an observed, unweighted survey sample forces us to make certain assumptions about the sampling process and the reasons behind participants' willingness to take part in the survey (Caughey et al., 2020). Adjustment weighting, also known as calibration weighting, can decrease variance, correct for bias, and adjust for nonresponse (Valliant et al., 2018) and includes methods such as raking or post-stratification (Deville & Särndal, 1992). Importantly, calibration is effective in mitigating nonresponse bias only to the extent that the selected target variables predict both the likelihood of response and the outcomes being measured.

When adjustment or calibration weights are applied to a survey sample, the survey sample is weighted to population-level estimates that are derived from external data sources (e.g., census data, student administrative records; Caughey et al., 2020). Typically, auxiliary sources provide population estimates for either single marginal (e.g., estimates for race, estimates for gender) or joint distributions (e.g., estimates for interaction of race and gender) for the variables of interest (Caughey et al., 2020). Joint distributions are typically preferred over multiple marginal distributions as using multiple marginal distributions can introduce some bias because the auxiliary variables are additive instead of interactive (Caughey et al., 2020).

A measurement model is then used to relate information from auxiliary sources to the true population distribution. The type of distribution (i.e., marginal vs. joint) can determine the type of weight method (e.g., entropy weighting vs. linear weighting), but the difference across methods is generally small (Kalton & Flores-Cervantes, 2003).

We used multiple marginal distributions for the Educator Survey sample because a national-level joint distribution for race/ethnicity, gender, and geographic division is not available. When multiple marginal distributions are used, target weights can be estimated in several ways: (1) raking weights based on marginal distributions (e.g., separate weights for each variable of interest; Berinsky et al., 2011; Valliant et al., 2018), (2) synthetic joint population weights created from observed marginal proportions (e.g., using the marginal distributions to estimate interactions to create a joint distribution; Leeman & Wasserfallen, 2017), or (3) ecological inference, which incorporates auxiliary information from multiple sources to estimate the interaction of multiple target variables (Freedman, 2001; King et al., 2004).

We used raking weights for two reasons. First, national estimates for cross-classification of role (general educator vs. special educator), gender, race/ethnicity, highest level of education obtained, and geographic location based on U.S. Census division for K-12 educators are unavailable. Characteristics of public-school teachers are publicly available through the NCES, but cross-classifications are not provided. For example, NCES provides national estimates on the percentage of all public school teachers by gender (male or female), race/ethnicity (American Indian/Alaska Native, Asian, Black, Hispanic, Pacific Islander, White, or Two or more races), and highest degree (less than bachelor's, Bachelor's, Master's, Educational specialist, Doctor's; NCES, 2023), but does not provide the percentage of all public school teachers who are White, male, and hold a Master's degree.

Second, raking weights is the preferred method when cross-tabulating the variables of interest could result in very small sample sizes (Valliant & Dever, 2018). Given our interest in weighting by gender, race/ethnicity, and U.S. Census division, we anticipated that the intersection of these three characteristics would lead to small cell sizes. We estimated raking weights using the survey package, where standard errors are estimated via Taylor series linearization (Valliant et al., 2018).

Because calibrating a sample to estimate population-level estimates can contribute to the variance of an estimator, especially when nonprobability samples are used (Valliant et al., 2018), we assessed the variance of estimators using the Kish (1965; 1992) design effect due to having unequal weights. Once weights were applied, the Kish design effect is determined by calculating one plus the relvariance of the sample weights and interpreted as the increase in variance of an estimator due to having weights that are not the same (Valliant et al., 2018).

4.3 Data Analysis

After removing fraudulent responses, data was cleaned and analyzed. Data analyses were performed using the weighted sample. Below we outline the process used for cleaning the data as well as planned data analyses.

4.3.1 Data Cleaning and Variable Creation

The data were first cleaned to code items and variables in the same direction or level of assumed construct and in relation to existing surveys.

4.3.1.A Coding and Recoding

For multiple-choice and Likert-type items, the scales were coded so that a higher value on the scale indicates a higher level of the assumed construct or desired outcome. For example, item Q8.7_3 "I am happy with the level of collaboration I have with my colleagues" was answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided,

Agree, Strongly agree). Responses for this item were coded so that a higher level of agreement was associated with a higher numeric value. Specifically, "Strongly disagree" was coded as 1, "Disagree" as 2, "Undecided as 3", "Agree" as 4, and "Strongly agree" as 5.

To maintain consistency across items, negatively worded multiple choice or Likert-type items were reverse coded. For example, item Q9.5_2 "Inclusion impedes the learning of students performing at or above grade level" was answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree), but was coded so that "Strongly disagree" was coded as 5, "Disagree" as 4, "Undecided" as 3, "Agree" as 2, and "Strongly agree" as 1. Across both example items, a higher numeric value is associated with the intended outcome (e.g., feeling happy with the level of collaboration, believing that inclusion does not negatively impact students performing at or above grade level).

The Educator Survey utilized a variety of Likert scales where an unknown, unsure, or undecided option was included (Table 10). While some regard these options to indicate nonanswers or missing data (e.g., Lee et al., 2021), we included them in analyses and coded them in relation to the other Likert scale options.

Table 10. Likert Scales

Likert Scale	Item(s)
Level of agreement using a 5-point Likert scale: Strongly disagree, Disagree, Undecided, Agree, Strongly agree	Q6.20, Q8.7, Q8.10, Q8.13, Q9.5, Q9.6
Level of benefit: Not beneficial, Neutral, Somewhat beneficial, Beneficial, Very beneficial	Q8.5
Level of benefit: Not beneficial, Neutral, Somewhat beneficial, Beneficial, Very beneficial, I'm not familiar with this practice	Q7.9
Level of comfort: Very uncomfortable, Somewhat uncomfortable, Undecided, Somewhat comfortable, Very comfortable, This is not part of my job	Q7.10
Level of consistency: Not at all consistently, Somewhat consistently, Consistently, Very consistently	Q8.9, Q8.12
Level of confidence: Not at all confident, Slightly confident, Somewhat confident, Fairly confident, Completely confident, This is not part of my job	Q7.6
Level of effectiveness: Ineffective, Unsure, Somewhat effective, Effective, Very effective	Q9.12, Q9.13

Likert Scale	Item(s)
Level of frequency: None of the time, Sometimes (Some of the time), Most of the time, All of the time	Q6.21, Q6.22, Q9.7
Level of frequency: Never, 1-2 times per week, 3-4 times per week, Daily, Not applicable	Q7.3,
Level of relevance: Not relevant at all, Undecided, Somewhat relevant, Relevant, Very relevant	Q7.8

***Note*. Items in the table are identified using the parent item number. For example, Q6.20 asks participants to rate their level of agreement with each of the following statements thinking about their knowledge and resources to teach students with LD and lists four statements where each statement's item number is preceded with Q6.20 (e.g., Q6.20_1, Q6.20_2, Q6.20_3, etc.). Only the parent item number (Q6.20) is listed here. See the Open Science Framework project page (Wong et al., 2025) for the full list of parent and child item.**

4.3.1.B Variable Delineation and Creation

The Educator Survey included multiple-choice and select-all-that-apply items. In some cases, the select-all-that-apply items were separated into individual variables representing each available option. For example, item Q6.19 presents a list of 14 sources of input that can be used to determine student transition needs (e.g., student input, adaptive or independent living skills inventory) and asks secondary educators to select all that they typically use to determine student transition needs at their school. Because secondary educators could presumably select different combinations of the 14 options, this item was delineated into 14 variables where each variable represented selecting one of the options. In order words, a variable was created to indicate the number of survey respondents who selected student input, a variable was created to indicate the number of survey respondents who selected social skills inventory, and so on.

4.3.2 Structural Equation Modeling of Latent Factors

We utilized structural equation modeling (SEM) to estimate and model the latent factor structure of survey items hypothesized to pool together (Hayduk et al., 2007) and examine the relationships among latent factors (Kline, 2016). More specifically, we used model generation to build, examine, and respecify models. Model generation is typically used in situations when an initial model does not fit the data and necessitates adjustments (Kline, 2016). The modified or respecified model is then run with the same data in order to achieve a model that makes theoretical sense, is reasonably parsimonious, and corresponds reasonably with the data (Joreskog, 1993; Kline, 2016).

We used multiple goodness-of-fit indices to evaluate model fit, including the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean-Square Error of Approximation (RMSEA), and Standardized Root Mean-Square Residual (SRMR). Adequate model fit was determined based

on the following benchmarks: CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

4.3.3 Subgroup Analyses

Additional analyses included subgroup comparisons to analyze survey responses in relation to participant characteristics, such as race/ethnicity. More specifically, we utilized generalized linear modeling to examine group differences on outcomes and latent factors of interest.

4.3.3.A Creation of Subgroup Variables

Subgroups of interest included (1) race/ethnicity, (2) number of years teaching, (3) certification route, (4) role (general educator vs. special educator), and (5) number of students below grade level. A summary of the subgroup variables is provided in Table 11.

The race/ethnicity variable in the Educator Survey (Q4.5) included "American Indian or Alaska Native", "Asian American or Asian", "Black or African American", "Hispanic or Latino", "Native Hawaiian or Pacific Islander", "Two or more", "Other", "White", and "Prefer not to answer" as response options. For the subgroup analyses, we used White and non-White.

The number of years teaching variable is based on Q5.2 that asked respondents to type in the total number of years they have been a licensed K-12 teacher in the United States. Respondent answers were then grouped into 0-3 years, 4-9 years, and 10 or more years.

The certification route variable used Q5.7 that asked respondents to select all that applied to how they earned their credential or license for their current teaching role and provided "Teacher preparation program at a community college", "Teacher preparation program at a college or university", "Alternative certification program", "Emergency certification program", and "Other" as response options. We collapsed these into two categories for the subgroup analyses: teacher preparation program at a college or university and all other options.

The role variable was based on Q2.6 that asked respondents to select the role that best describes their current position and included "General educator" and "Special educator" as response options.

The number of students below grade level was based on Q6.8 that asked respondents to approximate how many of their students are below grade-level standards and expectations and included "None of my students", "A few of my students", "About half of my students", "Most of my students", and "All of my students" as response options. For the sake of parsimony, we collapsed these into three categories: none/a few of my students, about half of my students, and more than half/all of my students.

Table 11. Subgroup Variables

Subgroup Variable	Reference Group	Comparison Group(s)
Race	White	Non-White
Number of years teaching	0-3 years	4-9 years, 10 or more years
Certification Route	Teacher preparation program at a college or university	All other routes (alternative, emergency, other)
Role	General Educator	Special Educator
Number of students below grade level	None or a few of my students	About half of my students, most/all of my students

4.3.3.B Process for Subgroup Analyses—GLM

We used generalized linear models (GLMs) to conduct subgroup analyses on the primary outcome of interest and on significant latent factors identified in the SEMs. Our primary outcome of interest was feeling confident in one's ability to adapt instruction to meet the needs of students with LD (Q7.6_1) where respondents answered using a six-point Likert scale for level of confidence. Each response option on the Likert scale was assigned a numeric value where a higher value indicated a higher level of confidence: "Not at all confident" = 1, "Slightly confident" = 2, "Somewhat confident" = 3, "Fairly confident" = 4, "Completely confident" = 5, and "This is not part of my job" = Not applicable.

For each significant latent factor, we created two variables. The first added the items from the latent factor and the second averaged the items from the latent factor; each representing a continuous variable for the latent factor of interest.

We then checked model assumptions for generalized linear models (GLMs), which included linearity, homogeneity of variance, and normally distributed residuals (Finch et al., 2019). Additionally, we checked that each outcome variable approximated a normal distribution as one of the primary assumptions of significance tests in regression-based analyses is that the outcome variable is normally distributed. To check that the outcome and residuals approximated a normal distribution, we utilized various methods, including histograms, QQ plots, and skewness and kurtosis estimates. Histograms were used to visually assess whether the bell curve approached a normal distribution, where extreme skew can be relatively easy to detect (Kline, 2016). A symmetric distribution in a histogram suggests that the data adhere to

the normality assumption. We used the svyhist function of the *survey* package to create and examine histograms. QQ plots were used to plot residuals against a straight line that reflects the expected distribution of the data if the fit is normal (Finch et al., 2019); any deviation from the straight line indicates evidence of nonnormality. Additionally, we calculated skewness and kurtosis estimates where skewness indicates the shape of the distribution is asymmetrical about the mean while kurtosis indicates the peakedness of the curve (Kline, 2016). Ideal skewness and kurtosis values range between –2 and 2 (Gravetter & Wallnau, 2014), where skewness estimates greater than the absolute value of three and kurtosis estimates greater than the absolute value of 10 indicate a problem (Kline, 2011). If the variable was not normally distributed, we examined outliers using boxplots and applied log, square root, and cube root transformations and reexamined normality. This same process was repeated using the average of the survey items on the latent factor of interest (as opposed to the sum) to allow for analyses in the event the summation of the items did not approximate a normal distribution. The transformation that most approximated normality was then standardized to have a mean of 0 and a standard deviation of 1.

After we checked model assumptions, we applied the svyglm function of the *survey* package to conduct GLM analyses with raked weights, where the continuous variable representing the latent factor of interest was the outcome and categorical variables for subgroups of interest (e.g., role, number of years teaching, race/ethnicity, and certification route) were included as predictors. We used this approach to allow for clearer interpretations by avoiding the interaction of subgroup variables with the latent construct or with the outcome variable.

4.3.4 Thematic Coding of Open-Response Items

We analyzed four open-ended items using thematic coding:

- "How would you define an ideal inclusion model?" (Q9.2)
- "What does your school's inclusion model look like?" (Q9.3)
- "In this question, we define resilience as 'the ability to withstand and quickly recover from adverse job-related conditions.' In general, what factors help you be resilient when addressing the academic needs of students with and at risk for learning disabilities?" (Q9.9_1, Q9.9_2, Q9.9_3)
- "Is there anything else you think we should know about your needs in teaching students with learning disabilities?" (Q10.1)

Each item was analyzed using conventional content analysis (Hsieh & Shannon, 2005), an inductive method in which codes emerge directly from participants' responses (Saldaña & Omasta, 2016). The coding process unfolded in three rounds. First, responses were compiled in an Excel sheet and reviewed multiple times to build familiarity with the data. Initial codes were then generated by systematically examining individual responses and categorizing relevant

content, keeping the codes closely aligned with participants' original language to preserve their intent. As coding progressed, early codes were refined, and previous decisions were revisited in light of emerging insights. In the second round, initial codes were organized into potential themes, drawing on data across all responses, and these themes were reviewed for alignment with the original text. In the final round, themes were refined and consolidated into broader, overarching categories. These were named and defined through iterative analysis and in collaboration with the broader WestEd team. This systematic approach ensured that the resulting themes were grounded in participants' voices and accurately reflected their survey responses.

To ensure rigor and transparency in the coding process, several strategies were employed. First, the data were reviewed multiple times to develop a deep familiarity with the content. Second, codes were crafted to closely reflect participants' original language, prioritizing their voices over researcher interpretation. Third, both inductive and deductive approaches were used—allowing themes to emerge naturally from the data while also drawing on existing theories and prior research to provide context. Fourth, a constant comparison method was applied throughout the analysis, enabling the ongoing refinement of themes across responses and settings. Finally, an audit trail was maintained to document analytic decisions and support transparency in how themes were developed and validated.

5. Results

In this section, we describe how we cleaned and created the analytic sample, including data quality and weighting. Then, we present the descriptive statistics, subgroup analyses, and model results.

All data cleaning, descriptives, and analyses were conducted in R (version 4.4.2; R Core Team, 2024), and all code and data codebooks can be provided upon request by contacting NCLD or by visiting our Open Science Framework project page (Wong et al., 2025).

The Educator Survey was administered from January 8, 2024, 12 a.m., to December 17, 2024, 5:00 p.m. It is important to note here that many survey items ask educators to think about "the current school year"; thus, results include answers pertaining to the 2023-2024 and 2024-2025 school years.

It is also important to note here that we are not able to make causal claims due to the lack of temporal precedence (i.e., all variables and items were collected at the same time; Kline, 2016). Additionally, it is important to acknowledge that all the data was self-reported. Despite these limitations, the Educator Survey provides rich information from one of the largest national samples of K-12 general educators and special educators that teach students with LD.

5.1 Construction of the Analytic Sample

To create the analytic sample, we excluded participants who either did not consent to taking the survey, did not complete the inclusion criteria block, or did not meet inclusion criteria. Then, we removed participants who met fraudulent criteria. Next, we identified participants who exhibited suspicious criteria and applied weights to adjust the sample to reflect the national population. We provide a more detailed explanation of each step in the following sections.

5.1.1 Survey Responses and Data Validity

We received a total of 28,342 survey responses. Of these, 241 did not consent and 3,045 did not finish the inclusion criteria block. Of the remaining 25,056 responses, 13.41% (*n* = 3,359) were removed because they did not meet inclusion criteria (see Table 12).

Table 12. Summary of Removal Counts by Inclusion Criteria

Inclusion Criteria	*n* (%)
Did not meet Inclusion Criteria	3,359 (13.41)
Do not currently reside in the United States	58 (0.23)
Do not hold at least an associate's degree	586 (2.34)
Not a general educator or special educator	1,835 (7.32)
Do not currently teach in a K-12 setting	179 (0.71)
Do not currently teach an academic subject area	130 (0.52)
Have not provided direct instruction support to K-12 students identified with LD in reading, writing, or math	151 (0.60)
Have not provided direct instructional support to K-12 students significantly below benchmarks in reading, writing, or math	214 (0.85)
If teach at a school for students with disabilities, do not teach students whose primary disability category is LD	206 (0.82)
Met Inclusion Criteria	21,697 (86.59)

***Note*. Percentages were calculated using the total number of survey respondents who completed the inclusion criteria block (*n* = 25,056).**

Of those who met our inclusion criteria (*n* = 21,697), 92.38% (*n* = 20,043) were removed because they exhibited at least one fraudulent indicator. Table 13 provides a summary of removal counts by fraudulent indicator and provides two columns. In the Exclusive column, each respondent is counted ***only once*** (i.e., respondents are removed from the sample as each criterion is applied so the table column sums to the total number of respondents that met inclusion criteria). For example, we begin with 21,697 respondents who met our inclusion criteria and removed 5,011 respondents whose IP address was outside of the United States. We then applied the next fraudulent criteria to the remaining 16,686 respondents. Thus, in the Exclusive column, each fraudulent criterion is mutually exclusive. In the Inclusive column, each respondent can be counted ***more than once*** (i.e., respondents can be flagged and counted on more than one fraudulent indicator so the table column will exceed the total number of

respondents that met inclusion criteria). The Inclusive column represents the total number of respondents that met each fraudulent indicator.

Table 13. Summary of Removal Counts by Fraudulent Indicator

Fraudulent Indicator	Exclusive *n* (%)	Inclusive *n* (%)
Fraud—remove from sample if one is present	20,043 (92.39)	20,043 (92.39)
IP address outside U.S.	5,011 (23.10)	5,011 (23.10)
Response to hidden item	2,810 (12.95)	2,955 (13.62)
Entire open response provided in a language other than English	54 (0.25)	191 (0.88)
Duplicate IP address	3,905 (18.00)	6,892 (31.76)
Source is not one we created [a]	177 (0.82)	228 (1.05)
Exact open response of more than three words provided	5,276 (24.32)	12,355 (56.94)
Response to open response item obviously irrelevant	578 (2.66)	1,750 (8.07)
Multiple incentive form submissions from the same survey ResponseID	359 (1.65)	1,909 (8.80)
Survey ResponseIDs across survey and incentive form do not match	1,092 (5.03)	11,199 (51.62)
Multiple incentive form submissions from the same email address	36 (0.17)	495 (2.28)
Invalid email address provided on incentive form	11 (0.05)	14 (0.06)
Duplicate email address on Young Adult and Educator incentive list	110 (0.51)	1,173 (5.41)

Fraudulent Indicator	Exclusive *n* (%)	Inclusive *n* (%)
Duplicate IP address on Young Adult and Educator Surveys	120 (0.55)	3,149 (14.51)
Duration < 5 minutes	2 (0.01)	72 (0.33)
reCAPTCHA score < 0.5	495 (2.28)	6,935 (31.96)
Open response partially provided in a language other than English	7 (0.03)	538 (2.48)
No fraudulent indicator met—retain in sample	1,654 (7.62)	1,654 (7.62)

***Note*. Percentages were calculated using the total number of survey respondents who met inclusion criteria (*n* = 21,697). In the Exclusive column, each respondent is counted *only once* (i.e., respondents are removed from the sample as each criterion is applied so the column sums to the total number of respondents that met inclusion criteria. In the Inclusive column, each respondent can be counted *more than once* (i.e., respondents can be flagged and counted on more than one fraudulent indicator so the table column will exceed the total number of respondents that met inclusion criteria).**

[a] This fraudulent criterion was not applied to respondents who were directly emailed using their publicly available teacher email.

After respondents were removed using fraudulent indicators, we applied our suspicious criteria where respondents were marked as suspicious if they provided a nonanswer to an open response item. Of the 1,654 respondents in the final sample, 16.99% (*n* = 281) were marked as suspicious and all 281 were retained in the sample.

The final sample contained 1,654 respondents, where 16.99% (*n* = 281) were marked as suspicious and 83.01% (*n* = 1,373) exhibited no suspicious indicators.

5.1.1.A Data Quality by Recruitment Source

To gain a sense of data quality, we examined the number of survey respondents by fraudulent and suspicious indicator by recruitment source. Recruitment methods were tracked using survey links with an embedded data field for source that we set.

As shown in Table 14, survey respondents recruited via email, Facebook, LinkedIn, Twitter/X, and snowball (where respondents were provided a survey link to share with colleagues) exhibited relatively high levels of fraudulent behavior, where at least 90% of responses from each recruitment method were flagged as fraudulent and removed from the full sample. These findings are supported by broader survey literature where respondents recruited from Twitter/X and LinkedIn often exhibit high rates of fraudulent behavior (e.g., Leighton et al., 2021; Pozzar et al., 2020).

Table 14. Data Quality by Recruitment Source

	Recruitment Source							
Criteria	**Blank *n* (%)**	**Email *n* (%)**	**Facebook *n* (%)**	**Flyer *n* (%)**	**LinkedIn *n* (%)**	**Twitter/X *n* (%)**	**Conference *n* (%)**	**Snowball *n* (%)**
Total Number of Respondents that Met Inclusion Criteria	2,009	15,613	928	11	3	50	10	2,845
Fraudulent	951 (47.34)	15,136 (96.94)	918 (98.92)	4 (36.36)	3 (100.00)	45 (90.00)	2 (20.00)	2,756 (96.87)
Suspicious	160 (7.96)	86 (0.55)	1 (0.11)	1 (9.09)	0 (0.00)	2 (4.00)	0 (0.00)	31 (1.09)
No fraudulent or suspicious behavior	898 (44.70)	391 (2.50)	9 (0.97)	6 (54.55)	0 (0.00)	3 (6.00)	8 (80.00)	58 (2.04)

***Note*. Percentages were calculated using the total number of survey respondents who met inclusion criteria for each specific recruitment source. For example, percentages in the "Facebook" column were calculated using the total number of survey respondents recruited via Facebook (*n* = 928).**

5.1.1.B Response Rates

Our eligibility rate, or the number of respondents who met inclusion criteria divided by the number of respondents that completed the inclusion criteria block (AAPOR, 2016), was 86.59%. We had 25,056 respondents complete the inclusion criteria block, of which 21,697 met inclusion criteria.

Our contact rate, or the number of respondents who were successfully contacted divided by the total number of eligible sample units (Valliant et al., 2018), was 24.05%. As shown in Table 15, we directly emailed 167,467 participants using their publicly available teacher email address. Of these individuals, 16,321 were excluded from the contact rate as the email failed, was blocked, or hard bounced, and 36,346 were categorized as "successful contact" where the email was opened or there was some survey activity (i.e., survey started, survey finished, session expired).

Table 15. Contact Rate—Counts by Qualtrics Email Distribution Status

Email Status	Categorization	Count
Email Sent	Eligible Sample Unit – included in denominator	114,794
Email Failed	Ineligible – excluded from calculation	6
Email Blocked	Ineligible – excluded from calculation	1,898
Email Hard Bounce	Ineligible – excluded from calculation	14,417
Email Opened	Successful Contact – included in numerator and denominator	31,484
Survey Started	Successful Contact – included in numerator and denominator	105
Survey Finished	Successful Contact – included in numerator and denominator	1,756

Email Status	Categorization	Count
Session Expired	Successful Contact – included in numerator and denominator	3,001

***Note*. Contact rate is calculated by dividing the number of respondents that were successfully contacted (*n* = 36,346) by the number of eligible sample units, including those that were successfully contacted (*n* = 151,140). Definitions for each email status can be found in Qualtrics (2025b).**

5.1.2 Missing Data

All survey questions were required to answer. However, we did have missing data on items Q8.12_1, Q8.12_2, Q8.12_3, Q8.12_4, Q8.12_5, Q8.12_6, Q8.12_7, Q8.12_8, Q8.12_9, Q8.13_1, Q8.13_2, Q8.13_3, Q8.13_4, and Q8.13_5. All items were marked require to answer and were set to display for individuals who reported "Special educator" as their current role. We treated this data as missing not at random and suspect we encountered issues with district firewalls blocking portions of the survey. Weighted descriptives for these items were calculated using the weighted total of individuals who answered the survey item. Table 16 provides a summary of the unweighted and weighted number of responses by item.

Table 16. Number of Responses for Items with Missing Response

Item	Number of Responses (Unweighted)	% Missing (Unweighted) [a]	Number of Responses (Weighted)	% Missing (Weighted) [b]
Overall, the general education teachers at my school…Meet the academic needs of all their students (Q8.12_1) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Meet the behavioral needs of all their students (Q8.12_2) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Are competent working with students with learning disabilities (Q8.12_3) [c]	392	25.19	623,839	22.37

Item	Number of Responses (Unweighted)	% Missing (Unweighted) [a]	Number of Responses (Weighted)	% Missing (Weighted) [b]
Overall, the general education teachers at my school…Are open to collaboration (Q8.12_4) [c]	300	42.75	486,804	39.42
Overall, the general education teachers at my school…Make instructional decisions aligned with student IEP goals (Q8.12_5) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Value my input (Q8.12_6) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Act on my input (Q8.12_7) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Understand my specialized role, expertise, and responsibilities (Q8.12_8) [c]	392	25.19	623,839	22.37
Overall, the general education teachers at my school…Help my job feel more manageable (Q8.12_9) [c]	392	25.19	623,839	22.37
At my school, collaborating with general educators benefits students with learning disabilities. (Q8.13_1) [d]	392	25.19	623,839	22.37
At my school, we (general and special educators) have common teaching philosophies for teaching students with learning disabilities. (Q8.13_2) [d]	392	25.19	623,839	22.37
I know how to discuss topics related to disability and special education with my general	392	25.19	623,839	22.37

Item	Number of Responses (Unweighted)	% Missing (Unweighted) [a]	Number of Responses (Weighted)	% Missing (Weighted) [b]
education colleagues at my school. (Q8.13_3) [d]				
I talk with my general education colleagues when a student's IEP is not being implemented correctly. (Q8.13_4) [d]	392	25.19	623,839	22.37
I talk to the general education teacher if I have concerns about a student's IEP. (Q8.13_5) [d]	392	25.19	623,839	22.37

[a] Percentages in this column represent unweighted estimates based on our survey sample of respondents who reported "Special Educator" as their current role in Q2.6 (*n* = 524).

[b] Percentages in this column represent weighted estimates based on our survey sample of respondents who reported "Special Educator" as their current role in Q2.6 (*n* = 803,561).

[c] This item was answered using a 4-point Likert scale for level of consistency.

[d] This item was answered using a 5-point Likert scale for level of agreement.

Additionally, when coding Likert-type items, "Not Applicable" or "This does not apply to me" was not assigned a numeric value and thus essentially coded as missing.

5.1.3 Weighting

To approximate a nationally representative sample based on role (general educator vs. special educator), gender, race/ethnicity, highest level of education obtained, and geographic location based on U.S. Census division, we used publicly available data from the U.S. Department of Education that provides national estimates of selected characteristics for all public-school teachers. More specifically, we used (1) data from NCES (2023) to weight our sample to national estimates for gender, race/ethnicity, and highest level of education obtained, (2) data from the 2022 Digest of Education Statistics (U.S. Department of Education, 2023) to weight our sample to national estimates for geographic location (i.e., U.S. Census division) based on state where the respondent currently teaches, and (3) information from NCLD's mission and directive for this work to weight our sample for role (general educator vs. special educator). Across sources, we used data from the 2020-2021 school year, which was publicly available at the beginning of our survey study in July 2023.

Given that we only had marginal distributions available (e.g., mutually exclusive national estimates for gender, race/ethnicity, state), we utilized raking to estimate calibration weights. First, we created targets for each characteristic of interest (e.g., targets for gender, targets for

race/ethnicity, targets for each U.S. Census division) using percentages that are publicly available from the USDOE.

We then used population percentages to estimate population counts. For example, we estimated the number of female teachers in the 2020-2021 school year by multiplying the reported population percentage of 77% female (NCES, 2023) by the total number of public-school teachers reported by the USDOE (2023) in the 2020-2021 school year (*n* = 3,214,242).

Next, we included additional population targets for respondents in our survey who selected gender or race/ethnicity options that did not align with data from the USDOE. Within our survey, all participants were required to answer questions about their gender and race/ethnicity. Our options for these items included additional choices. For example, our survey included "Male," "Female," "Non-binary," "Transgender man or transgender woman," "Other," and "Prefer not to answer" as options for gender while NCES (2023) only provides national estimates for "Male" and "Female" categories. Similarly, we included an "Other" and "Prefer not to answer" options in addition to the selections that the USDOE report (e.g., American Indian or Alaskan Native, Asian American or Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Pacific Islander, White, and two or more; NCES, 2023). To be inclusive of all individuals and retain the ability to make comparisons across different genders, we used our unweighted survey sample counts for "Non-binary," "Transgender man or transgender woman," "Other" (gender), "Prefer not to answer" (gender), and "Prefer not to answer" (race/ethnicity) as the population targets. Therefore, we were able to retain the full sample of 1,654 individuals for raking weights.

Table 17 provides a summary of the targeted population proportions for each characteristic of interest.

Table 17. Population Targets Used for Analysis

Characteristics	Population Target (Count) [a]	Population Target (Proportion)
Role (Q2.6) [b]		
General Educator	2,410,682	0.75
Special Educator	803,561	0.25
Gender (Q4.4) [c]		

Characteristics	Population Target (Count) [a]	Population Target (Proportion)
Female	2,474,966	0.7700
Male	739,276	0.2300
Non-binary [d]	5	Not calculated
Transgender man or transgender woman [d]	0	Not calculated
Other [d]	0	Not calculated
Prefer not to answer [d]	16	Not calculated
Race/Ethnicity (Q4.5) [c]		
American Indian or Alaska Native [e]	22,500	0.0070
Asian	64,285	0.0200
Black	192,855	0.0600
Hispanic	289,282	0.0900
Native Hawaiian or Pacific Islander [f]	9,643	0.0030
White	2,571,394	0.8000
Two or more	64,285	0.0200
Other [d]	12	Not calculated
Prefer not to answer [d]	34	Not calculated
Highest Level of Education Obtained (Q2.7) [c]		

Characteristics	Population Target (Count) [a]	Population Target (Proportion)
Less than a Bachelor's (includes "High school diploma, GED, or equivalent" and "associate's degree")	32,142	0.0100
Bachelor's	1,221,412	0.3800
Master's	1,639,263	0.5100
Educational Specialist	257,139	0.0800
Doctorate	32,142	0.0100
Geographic Division (Q6.2) [g]		
East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin)	451,922	0.1406
East South Central (Alabama, Kentucky, Mississippi, Tennessee)	178,712	0.0556
Middle Atlantic (New Jersey, New York, Pennsylvania)	458,672	0.1427
Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming)	217,283	0.0676
New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)	166,819	0.0519
Pacific (Alaska, California, Hawaii, Oregon, Washington)	382,495	0.1190
South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia)	623,242	0.1939
West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)	243,640	0.0758

Characteristics	Population Target (Count) [a]	Population Target (Proportion)
West South Central (Arkansas, Louisiana, Oklahoma, Texas)	491,779	0.1530

[a] Population targets were estimated by multiplying the population proportion by the total number of public-school teachers reported by the USDOE (2023) in the 2020-2021 school year (*n* = 3,214,242) and were rounded up to the nearest whole number.

[b] No external source was used. These percentages were based on NCLD's mission and directive for this work.

[c] Target proportions were based on data from NCES (2023) for the 2020-2021 school year. The genders and races/ethnicities provided in this table reflect the options that were provided on the Educator Survey; "Not calculated" indicates that a specific category was not reported in the source. For example, NCES (2023) does not provide the percentage of public-school teachers who identify as non-binary and only reports male and female.

[d] NCES does not report this category. The reported number represents the unweighted number of Educator Survey respondents who selected this option.

[e] NCES (2023) reports less than 1 percent of all public of all public-school teachers identified themselves as American Indian/Alaska Native in the 2020-2021 school year. We used 0.70% as no specific percentage was given.

[f] NCES (2023) reports less than one-half of 1 percent of all public of all public-school teachers identified themselves as Native Hawaiian or Pacific Islander in the 2020-2021 school year. We used 0.30% as no specific percentage was given.

[g] Geographic divisions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.). Survey item Q6.2 (state where respondent currently teaches in) was used to categorize respondents into divisions, instead of survey item Q4.2 (state where respondent currently lives). Population targets by geographic division were estimated from USDOE (2023).

We then used the rake function from the survey package (Lumley, 2004; 2024) in R to create raked weights. The rake function produces similar estimates as using the calibrate function that computes ratio estimator weights (Valliant et al., 2018).

In line with best practice, we then used the deffK function of the PracTools package (version 1.5; Valliant & Zipf, 2024) to estimate the Kish (1965; 1992) design effect due to weighting, which is interpreted as the increase in variance of an estimator due to having weights that are not the same (Valliant et al., 2018). For example, a Kish design effect of 1.1467 suggests the raked weights resulted in a 14.67% increase in variance.

When we weighted the Educator Survey sample by role, gender, race/ethnicity, highest degree obtained, and geographic division, deffK ranged from 3.78 (when using proportions) to 6.71 (when using counts), suggesting our sample needed to be considerably larger to interpret weighted estimates. We examined descriptives for role, gender, race/ethnicity, highest degree obtained, and geographic division within our sample and suspected the large deffKs stemmed from geographic division since 65.54% (*n* = 1,084) of our sample is from Florida.

Given the imbalances stemming from state where educators reported they currently teach, we removed weighting by division and obtained deffKs within acceptable ranges.

Table 18 provides estimates, standard errors (SE), and coefficients of variation (CVs) for estimated totals and estimated proportions for role, gender, race/ethnicity, and highest degree

obtained from the target population, original survey sample, and the sample after raking weights were applied. When calibration is used appropriately, the standard errors for the weights should be 0 (Valliant et al., 2018).

Table 19 compares the sum of the weights to the external population count. When weights are used, the sum of the weights should be an estimate of the total number in the population (Valliant et al., 2018).

Table 20 provides the mean, median, minimum, maximum weights as well as the Kish design effect when weighting by counts and when weighting by proportions. The Kish design effect due to weighting was 1.1896 when using counts, suggesting the raked weights resulted in a 18.96% increase in variance, and 1.1483 when using proportions, suggesting the raked weights resulted in a 14.83% increase in variance.

Table 18. Comparison Across Population, Sample, and Raking by Characteristic

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Role						
General Educator						
Population [a]	2,410,682	--	--	0.7500	--	--
Unweighted Sample	1,130	18.92	0.02	0.6832	0.0114	0.0168
Raked estimate	2,386,573	0.01	0.00	0.7491	0.0005	0.0006
Special Educator						
Population [a]	803,561	--	--	0.2500	--	--
Unweighted Sample	524	18.92	0.04	0.3168	0.0114	0.0361
Raked estimate	795,525	0.01	0.00	0.2509	0.0005	0.0019

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Gender						
Female						
Population [b]	2,474,966	--	--	0.7700	--	--
Unweighted Sample	1,180	18.39	0.02	0.7134	0.0111	0.0156
Raked estimate	2,450,199	0.01	0.00	0.7611	0.0002	0.0002
Male						
Population [b]	739,276	--	--	0.2300	--	--
Unweighted Sample	453	18.14	0.04	0.2739	0.0110	0.0400
Raked estimate	731,878	0.01	0.00	0.2265	0.0001	0.0007
Non-binary						
Population [c]	5	--	--	0.0030	--	--

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Unweighted Sample	5	2.23	0.45	0.0030	0.0014	0.4467
Raked estimate	5	0.00	0.00	0.0029	0.0001	0.0178
Transgender woman or transgender man						
Population [c]	0	--	--	0.0000	--	--
Unweighted Sample	0	--	--	0.0000	--	--
Raked estimate	0	0.00	0.00	0.0000	0.00	0.00
Other						
Population [c]	0	--	--	0.0000	--	--
Unweighted Sample	0	--	--	0.0000	--	--
Raked estimate	0	0.00	0.00	0.0000	0.00	0.00
Prefer not to answer						

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Population [c]	16	--	--	0.0097	--	--
Unweighted Sample	16	3.98	0.25	0.0097	0.0024	0.2489
Raked estimate	16	0.00	0.00	0.0095	0.0000	0.0023
Race						
American Indian or Alaska Native						
Population [b]	22,500	--	--	0.0070	--	--
Unweighted Sample	15	3.86	0.26	0.0091	0.0023	0.2571
Raked estimate	22,275	0.00	0.00	0.0068	0.0000	0.0027
Asian American or Asian						
Population [b]	64,285	--	--	0.0200	--	--
Unweighted Sample	35	5.85	0.17	0.0212	0.0035	0.1673

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Raked estimate	63,641	0.00	0.00	0.0193	0.0000	0.0025
Black or African American						
Population [b]	192,855	--	--	0.0600	--	--
Unweighted Sample	231	14.10	0.06	0.1397	0.0085	0.0610
Raked estimate	190,924	0.00	0.00	0.0583	0.0001	0.0010
Hispanic or Latino						
Population [b]	289,282	--	--	0.0900	--	--
Unweighted Sample	152	11.75	0.08	0.0919	0.0071	0.0773
Raked estimate	286,385	0.00	0.00	0.0875	0.0001	0.0007
Native Hawaiian or Pacific Islander						
Population [b]	9,643	--	--	0.0030	--	--

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Unweighted Sample	6	2.45	0.41	0.0036	0.0015	0.4076
Raked estimate	9,546	0.00	0.00	0.0029	0.0000	0.0037
Two or more						
Population [b]	64,285	--	--	0.0200	--	--
Unweighted Sample	29	5.34	0.18	0.0175	0.0032	0.1841
Raked estimate	63,641	0.00	0.00	0.0194	0.0000	0.0017
White						
Population [b]	2,571,394	--	--	0.8000	--	--
Unweighted Sample	1,140	18.83	0.02	0.6891	0.0114	0.0165
Raked estimate	2,545,641	0.01	0.00	0.7785	0.0001	0.0001
Other						

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Population [b]	12	--	--	0.0073	--	--
Unweighted Sample	12	3.45	0.29	0.0073	0.0021	0.2877
Raked estimate	12	0.00	0.00	0.0071	0.0000	0.0010
Prefer not to answer						
Population [c]	34	--	--	0.0206	--	--
Unweighted Sample	34	5.77	0.17	0.0206	0.0035	0.1698
Raked estimate	34	0.00	0.00	0.0201	0.0000	0.0009
Degree						
Less than a Bachelor's (i.e., high school diploma, GED, or equivalent)						
Population [b]	32,142	--	--	0.0100	--	--
Unweighted Sample	13	3.59	0.28	0.0079	0.0022	0.2763

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Raked estimate	32,142	0.00	0.00	0.0101	0.0000	0.0000
Bachelor's degree						
Population [b]	1,221,412	--	--	0.3800	--	--
Unweighted Sample	705	20.12	0.03	0.4262	0.0122	0.0285
Raked estimate	1,221,412	0.00	0.00	0.3838	0.0000	0.0000
Master's degree						
Population [b]	1,639,263	--	--	0.5100	--	--
Unweighted Sample	685	20.03	0.03	0.4141	0.0121	0.0293
Raked estimate	1,639,263	0.00	0.00	0.5152	0.0000	0.0000
Educational Specialist degree						
Population [b]	257,139	--	--	0.0800	--	--

	Estimated Count			Estimated Proportion		
	Est.	SE	CV	Est.	SE	CV
Unweighted Sample	193	13.06	0.07	0.1167	0.0079	0.0677
Raked estimate	257,139	0.00	0.00	0.0808	0.0000	0.0000
Doctorate degree						
Population [b]	32,142	--	--	0.0100	--	--
Unweighted Sample	58	7.48	0.13	0.0351	0.0045	0.1290
Raked estimate	32,142	0.00	0.00	0.0101	0.0000	0.0000

[a] No external source was used. These percentages were based on NCLD's mission and directive for this work. Population counts were estimated by multiplying the population proportion by the total number of public-school teachers reported by the USDOE (2023) in the 2020-2021 school year (*n* = 3,214,242) and were rounded up to the nearest whole number.

[b] Population proportions were based on data from NCES (2023) for the 2020-2021 school year. Population counts were estimated by multiplying the population proportion by the total number of public-school teachers reported by the USDOE (2023) in the 2020-2021 school year (*n* = 3,214,242) and were rounded up to the nearest whole number.

[c] Population total reflects the unweighted number of Educator Survey participants who selected this category.

Table 19. Comparison of Weights and Population Totals

Demographic	Sum of Raked Weights	Population
Role	3,214,243	3,214,243
Gender	3,214,243	3,214,263
Race	3,214,243	3,214,290
Highest Degree Obtained	3,214,243	3,182,098

Note. **Population totals across role, gender, race, and highest degree earned were not equal due to inconsistencies in reported NCES (2023) and USDOE (2023) data.**

Table 20. Summary Statistics of Weights

Statistic	Using raked counts	Using raked proportions
Mean	1,943.32	0.0006
Median	2,132.55	0.0007
Minimum	0.00	0.0001
Maximum	3,224.05	0.0010
deffK	1.1896	1.1483

All weights by crossed role, gender, race/ethnicity, and highest degree obtained are provided in Appendix D. Final target weights were included in analyses through the *surveydesign* function of the survey package.

5.2 Descriptive Statistics

Below we provide descriptive statistics using the final, weighted analytic sample. Results are primarily presented in tables and organized by survey block. The values in the tables below do not represent the response size of our sample (*n* = 1,654). Instead, they represent the weighted percentage when our sample was weighted using the methodology described above. We present weighted percentages in these tables as they reflect responses from a sample of K-12 educators that were weighted to be nationally representative based on role, gender, race/ethnicity, and highest degree obtained. Further, we provide the unweighted sample size in the footnotes for each table.

Additionally, some survey items provided a text box when an "Other" option was provided as a response choice. Some typed in responses were re-categorized into the provided multiple choice response options while others were left under the "Other" option. The typed in responses, along with which category a typed in response was recoded as, are provided in Appendix E.

5.2.1 Demographics

This first section focuses on demographic characteristics. As shown in Table 21, most respondents were 35 to 44 years old (32.71%), female (77.00%), White (80.00%), and report a master's degree as their highest level of education (51.52%). Additionally, 43.62% estimate their household income to be $86,000 to $164,999.

Table 21. Characteristics: Demographics

Variable	Weighted %
What is your current age? (Q4.3)	
18 to 24	1.04
25 to 34	22.12
35 to 44	32.71
45 to 54	27.00
55 to 64	15.83

Variable	Weighted %
65+	1.29
What is your gender identity? (Q4.4)	
Female	77.00
Male	23.00
Non-binary	0.00
Transgender woman or transgender man	0.00[a]
Other	0.00[a]
Prefer not to answer	0.00
What is your race/ethnicity? (Q4.5)	
American Indian or Alaska Native	0.70
Asian American or Asian	2.00
Black or African American	6.00
Hispanic or Latino	9.00
Native Hawaiian or Pacific Islander	0.30
White	80.00
Two or more	2.00
Other	0.00
Prefer not to answer	0.00

Variable	Weighted %
What is the highest level of education that you have completed? (Q2.7)	
Primary school	0.00[b]
High school diploma, GED, or equivalent	0.00[b]
Associate's degree	1.01
Bachelor's degree	38.38
Master's degree	51.52
Education Specialist degree (e.g., Ed.S.)	8.08
Doctoral degree (e.g., Ph.D.)	1.01
None of the above.	0.00[b]
Which best describes your total household income? (Q4.6)	
$0 to $20,999	0.61
$21,000 to $40,999	2.79
$41,000 to $85,999	37.38
$86,000 to $164,999	43.62
$165,000 to $209,999	10.87
$210,000 to $525,999	3.85
$525,000+	0.89
Where do you currently live? (Q4.2) [c]	

Variable	Weighted %
East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin)	2.50
East South Central (Alabama, Kentucky, Mississippi, Tennessee)	2.18
Middle Atlantic (New Jersey, New York, Pennsylvania)	3.17
Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming)	2.97
New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)	1.60
Pacific (Alaska, California, Hawaii, Oregon, Washington)	9.50
South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia)	74.33
West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)	1.61
West South Central (Arkansas, Louisiana, Oklahoma, Texas)	2.14

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding.**

[a] **Weighted percentage is exactly 0 as no individuals selected this response option.**

[b] **Weighted percentage is exactly 0 as individuals who selected this response option were excluded from the survey.**

[c] **Geographic divisions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.).**

5.2.2 Teaching Demographics and Current Teaching Setting

These next items asked about teaching characteristics, including credentials. As shown in Table 22, 69.27% of respondents have been licensed K-12 teachers in the United States for 10 or more years; 95.44% reported holding full, standard, or professional licenses; and 75.48% report attending a teacher preparation program at a college or university. As shown in Table 23, 72.40% report teaching in the South Atlantic division of the United States, 51.61% report teaching in a suburban area, 62.43% at a Title 1 school, and 85.60% report teaching at a public school.

Table 22. Characteristics: Teaching Demographics and Credentials

Variable	Weighted %
How many years, in total, have you been a licensed K-12 teacher in the United States? (Q5.2)	
0-3 years	2.50
4-9 years	28.23
10 or more years	69.27
What type of state teaching license, certificate, or other state required document do you hold? Select all that apply to your current role. (Q5.4) [a]	
Full, standard, or professional	95.44
National Board	7.92
Substitute	2.63
Emergency	1.41
Alternative (e.g., Teach for America)	2.52
Provisional	2.32
Administrative	2.83
Other	0.26
How did you earn your credential(s) or license(s) for your current teaching role? Select all that apply. (Q5.7) [a]	
A teacher preparation program at a community college	18.06
A teacher preparation program at a college or university	75.48

Variable	Weighted %
Alternative certification program	18.56
Emergency certification program	2.63
Other (Q5.7_6_TEXT) [b]	1.77
Does your current teaching assignment (e.g., grade level, content area) align with your active credential(s) or license(s)? (Q5.6)	
Yes	99.65
No	0.35

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding.**

[a] Item was select-all-that apply and may not total to 100%.

[b] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

Table 23. Characteristics: Current School

Variable	Weighted %
What state do you currently teach in? (Q6.2) [a]	
East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin)	2.46
East South Central (Alabama, Kentucky, Mississippi, Tennessee)	2.19
Middle Atlantic (New Jersey, New York, Pennsylvania)	3.12
Mountain (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming)	5.09
New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)	1.55

Variable	Weighted %
Pacific (Alaska, California, Hawaii, Oregon, Washington)	9.72
South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia)	72.40
West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)	1.47
West South Central (Arkansas, Louisiana, Oklahoma, Texas)	2.00
Which best describes where your school is? (Q6.3)	
Urban area	35.89
Suburban area	51.61
Rural area	10.58
I'm not sure.	1.92
Do you currently teach at a Title 1 school? (Q6.4)	
Yes	62.43
No	35.07
Unsure	2.50
What type of school do you currently teach at? (Q6.5)	
Public school	85.60
Private school	7.39
Charter school (public or private)	4.32
Montessori school	0.45

Variable	Weighted %
Alternative school or center (e.g., juvenile justice schools, school or center for behavior)	0.70
School for students with learning disabilities	1.53
Other	0.02

Note. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding.

[a] Geographic divisions are based on the nine divisions from the U.S. Census Bureau (U.S. Census Bureau, n.d.).

The majority of our sample reported being in a general educator role (75.00%), with 58.62% teaching students in elementary grades and 68.96% currently teaching reading (see Table 24). When asked about their students' academic abilities, 35.61% reported that a few of their students are below grade-level standards and expectations and 57.47% reported that a few of their students have or are suspected of having a learning disability in reading, writing, or math.

Table 24. Characteristics: Current Role

Variable	Weighted %
Which of the following best describes your current role? (Q2.6)	
General educator	75.00
Special educator	25.00
How many years have you been in your current role at your current school? (Q5.3)	
0-3 years	29.68
4-9 years	41.59
10 or more years	28.73
What grade level(s) do you currently teach? Select all that apply. (Q6.7) [a]	

Variable	Weighted %
Elementary (K, 1st, 2nd, 3rd, 4th, 5th)	58.62
Middle (6th, 7th, 8th)	27.28
High (9th, 10th, 11th, 12th)	26.83
What academic subjects do you currently teach? Select all that apply. (Q2.8) [a]	
Reading or English Language Arts	68.96
Mathematics	58.15
Social Studies (e.g., history, civics, economics, government)	46.26
Science	46.09
Writing	45.02
About how many of your students this year are below grade-level standards and expectations? (Q6.8)	
None of my students	1.67
A few of my students	35.61
About half of my students	32.26
Most of my students	21.47
All of my students	8.99
About how many of your students this year have or are suspected to have a learning disability in reading, writing, or math? (Q6.9)	
None of my students	1.70
A few of my students	57.47

Variable	Weighted %
About half of my students	20.76
Most of my students	11.18
All of my students	8.88

Note. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding.

[a] Item was select-all-that apply and may not total to 100%.

5.2.3 Basic Needs

The items in this section were primarily from the Basic Needs survey block and included questions related to school-based supports that are provided to available to students, including students with LD, and educator perceptions of supports, knowledge, and resources. Respondents who teach students in secondary grades (grades 6-12) also received items about transition supports.

As shown in Table 25, we asked respondents to select all the supports their school typically implements. Then, of the supports selected, we next asked who their school implements selected supports for (Table 26). Across these tables, 89.14% reported their school implements progress monitoring and data-based decision making for academics; of these respondents, 76.61% said this support was implemented for all students, 26.13% said for some students or as needed, and 0.77% were unsure.

Table 25. Basic Needs: School-Based Supports for Students—Multi-Tiered Systems of Support

Variable	Weighted %
Which of the following does your school typically implement? Select all that apply. (Q6.13)	
Beginning of the year screening for academic performance	64.39
Progress monitoring and data-based decision making for academics	89.14
Progress monitoring and data-based decision making for behavior	66.41

Variable	Weighted %
Progress monitoring and data-based decision making for social emotional support	45.51
Tiered intervention for academics	71.74
Tiered intervention for behavior	54.68
None of the above.	0.52

Note. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding. This item was select-all-that-apply and may not total to 100%.

Table 26. Basic Needs: School-Based Supports for Students— Proportion of Students Served within Multi-Tiered Systems of Support

Does your school implement these (select all that apply):	For all students Weighted %	For some students or as needed Weighted %	I'm not sure. Weighted %
Beginning of the year screening for academic performance (Q6.14_1)	88.40	13.53	1.03
Progress monitoring and data-based decision making for academics (Q6.14_2)	76.61	26.13	0.77
Progress monitoring and data-based decision making for behavior (Q6.14_3)	31.43	70.32	1.19
Progress monitoring and data-based decision making for social emotional support (Q6.14_4)	36.13	64.65	2.81
Tiered intervention for academics (Q6.14_5)	41.05	59.95	1.04
Tiered intervention for behavior (Q6.14_6)	19.25	80.93	1.25

Note. Respondents received the items in this table based on their answer to Q6.13 (Which of the following does your school typically implement?). For example, if respondents selected "Beginning of the year screening for academic performance" in Q6.13, they would then receive Q6.14_1 and indicate whether their school implements "Beginning of the year screening for academic performance" for all students, some students or as needed, or not sure. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654) and were calculated by using the weighted

total for each selected option. Each variable or survey item may not total to 100% due to rounding. Each item was select-all-that apply and may not total to 100%.

Tables 27 details information regarding special education service delivery models. More than half of general educator respondents (69.17%) reported that the inclusion model is used in their classroom and over half (52.06%) of special education respondents reported they implement the inclusion model.

When asked about supports for secondary students (Tables 28-29), 71.95% of respondents who teach secondary students said their school offers class period(s) dedicated to study skills, self-advocacy skills, social skills, or independent living to students with LD. Of these respondents, 54.23% said study skills were taught as a separate course and 47.48% said self-advocacy was taught as part of another course.

Table 27. Basic Needs: School-Based Supports for Students—Special Education Service Delivery Models

Variable	Weighted %
Which of the following special education service delivery model(s) are used in your classroom(s)? Select all that apply. (Q6.10) [a]	
Inclusion model	69.17
Co-teaching model	21.59
Push-in	39.93
Pull-out or resource room	40.84
Other (Q6.10_6_TEXT) [b]	0.92
None of the above.	2.81
Which of the following special education service delivery model(s) do you consistently provide? Select all that apply. (Q6.11) [c]	
Inclusion model	52.06
Co-teaching model	39.39

Variable	Weighted %
Push-in	33.46
Pull-out or resource room	29.81
Self-contained classroom	30.39
School for students with learning disabilities	13.73
Other (Q6.11_8_TEXT) [b]	1.88
None of the above.	0.07

Note. Each variable or survey item may not total to 100% due to rounding. The items in this table were select-all-that-apply and may not total to 100%.

[a] This item was only given to respondents who reported "General Educator" as their current role in Q2.6. Percentages represent weighted population estimates based on our survey sample of K-12 general educators (*n* = 1,130).

[b] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

[c] This item was only given to respondents who reported "Special Educator" as their current role in Q2.6. Percentages represent weighted population estimates based on our survey sample of K-12 special educators (*n* = 524).

Table 28. Basic Needs: School-Based Supports for Secondary Students—Opportunities for Secondary Students with LD

Which of the following are offered to students with learning disabilities at your school? Select all that apply.	Yes Weighted %	No Weighted %	I'm not sure. Weighted %
Career and technical education (e.g., courses focused on an occupation or job sector) (Q6.16_1)	65.33	29.11	5.56
Pre-employment transition services (Q6.16_2)	48.00	39.71	12.30
TRIO program (e.g., AVID, Upward Bound, Talent Search, Student Support Services) (Q6.16_3)	51.84	33.57	14.59
Career counseling (Q6.16_4)	59.10	31.99	8.91

Which of the following are offered to students with learning disabilities at your school? Select all that apply.	Yes Weighted %	No Weighted %	I'm not sure. Weighted %
College counseling (Q6.16_5)	61.52	31.06	7.42
On the job training or apprenticeship (Q6.16_6)	41.74	45.59	12.67
Class period(s) dedicated to study skills, self-advocacy skills, social skills, or independent living (Q6.16_7)	71.95	22.16	5.89
Military outreach (e.g., campus recruitment visit) (Q6.16_8)	47.20	42.11	10.69
Advanced Placement, International Baccalaureate, or Dual Enrollment classes (Q6.16_9)	65.40	28.91	5.69

***Note*. These items in this table were select-all-that-apply and were only given to respondents who currently teach secondary students (e.g., students in 6-12th grades). Percentages represent weighted population estimates based on our survey sample of educators who currently teach secondary students (*n* = 866). Each variable or survey item may not total to 100% due to rounding.**

Table 29. Basic Needs: School-Based Supports for Secondary Students—Class Periods

What do these class period(s) look like?	Taught as a separate course Weighted %	Taught as part of another course Weighted %	Something else Weighted %	My school does not have this. Weighted %
Study skills (Q6.17_1)	54.23	36.82	6.77	2.18
Self-advocacy (Q6.17_2)	27.45	47.48	16.13	8.94
Social skills (Q6.17_3)	38.96	39.38	14.01	7.65
Independent living (Q6.17_4)	26.71	34.51	12.77	26.02

***Note*. These items in this table were only given to respondents who said their school as class period(s) dedicated to study skills, self-advocacy, social skills, or independent living (i.e., selected "Yes" to Q6.16_7). Percentages represent weighted population estimates based on our survey sample of educators who currently teach secondary students and said their school has class period(s) dedicated to study skills, self-advocacy, social skills, or independent living (*n* = 629). Each variable or survey item may not total to 100% due to rounding.**

As shown in Table 30, 94.89% of respondents who teach secondary students said students with LD generally have the opportunity to enroll in elective classes. When asked about the information used to determine student transition needs (Table 31), 64.90% reported input from general education academic educators is used, 57.43% input from parents or caregivers, and 55.83% input from special educator(s).

Table 30. Basic Needs: School-Based Supports for Secondary Students—Elective Classes

Variable	Yes Weighted %	No Weighted %
Do your students with learning disabilities generally have the opportunity to enroll in elective classes? (Q6.18)	94.89	5.11

***Note*. Percentages represent weighted population estimates based on our survey sample of educators who currently teach secondary students (*n* = 866). Item may not total to 100% due to rounding.**

Table 31. Basic Needs: School-Based Supports for Secondary Students—Transition Planning

Which of the following are typically used to determine student transition needs at your school? Select all that apply. (Q6.19)	Weighted %
Student input (e.g., questionnaire, interview)	52.34
Adaptive or independent living skills inventory	27.72
Executive functioning skills inventory	29.49
Social skills inventory	32.78
Career aptitude survey	26.59
Input from general education academic educators (e.g., math, science, English, history)	64.90
Input from general education non-academic educators (e.g., art, physical education)	43.59

Which of the following are typically used to determine student transition needs at your school? Select all that apply. (Q6.19)	Weighted %
Input from vocational rehabilitation/career and technical education teachers	19.47
Input from special educator(s)	55.83
Input from parents or care-givers	57.43
State or district transition planning guide or needs assessment	30.74
Data from Early Warning Systems (e.g., attendance, behavior, course performance)	26.75
Other (Q6.19_32_TEXT) [a]	0.65
I'm not sure.	8.26

***Note*. Percentages represent weighted population estimates based on our survey sample of educators who currently teach secondary students (*n* = 866). This item was select-all-that-apply and may not total to 100%.**

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

When asked about support from their school leadership (Table 32), 76.18% reported their school leadership prioritized multi-tiered system of support for academics, 76.18% student mental health or social emotional supports, and 69.11% multi-tiered system of support for behavior.

Tables 33-36 detail educators' perceptions of their school leadership (Table 33), their colleagues and student families (Table 34), their working conditions (Table 35), and their ability to advocate (Table 36). As shown in Table 33, at least 50% of respondents reported their school leadership does each of the following most of the time or all of the time: helps them when they ask for it, has high academic expectations for all students, has the necessary training and knowledge to meet the academic needs of students with and at risk for LD, and follows through to meet the needs of students with or at risk for LD.

As shown in Table 34, at least 70% of respondents reported getting the support they need from their general educator colleagues most or all of the time and reported getting the support they need from their special educator colleagues most or all of the time.

Across the items in Table 35, at least 50% of respondents agreed or strongly agreed they have adequate knowledge, resources, and support to teach students with and at risk for LD. Lastly, 41.76% of respondents reported they feel like they can advocate for themselves most of the

time and 42.03% reported they feel like they can advocate for their students with LD most of the time (Table 36).

Table 32. Basic Needs: Support from School Leadership

Which of the following do your school leadership prioritize? Select all that apply. (Q6.15)	Weighted %
Multi-tiered systems of support for behavior (e.g., Positive Behavior Interventions and Supports)	69.11
Multi-tiered systems of support for academics (e.g., Response to intervention)	76.18
Student mental health or social emotional supports	76.18
Tutoring	43.10
Family and community partnerships	43.86
Professional Learning Communities (e.g., ongoing professional development, teacher learning group)	58.18
Educator mentorship	26.98
None of the above.	1.51

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). This item was select-all-that-apply and may not total to 100%.**

Table 33. Basic Needs: Support from School Leadership—Educator Perceptions

Rate the level of frequency for each of the following.	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
My school leadership's actions match the policies we are supposed to implement. (Q6.21_1)	1.70	26.34	49.46	22.50	2.93 (0.75)

Rate the level of frequency for each of the following.	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
My school's priorities are aligned with my district's expectations. (Q6.21_2)	1.15	13.97	48.61	36.26	3.20 (0.72)
My school leadership helps me when I ask for it. (Q6.21_3)	2.66	24.46	38.57	34.31	3.05 (0.82)
My school leadership has high academic expectations for all students, regardless of disability status. (Q6.21_4)	1.81	14.25	37.75	46.19	3.28 (0.79)
My school leadership has the necessary training and knowledge to meet the academic needs of students with and at risk for learning disabilities. (Q6.21_5)	2.96	25.19	42.13	29.73	2.99 (0.82)
My school leadership follows through to meet the needs of students with or at risk for learning disabilities. (Q6.21_6)	2.98	25.34	43.48	28.19	2.97 (0.81)

Note **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. None = None of the time, Some = Sometimes, Most = Most of the time, All = All of the time. All Likert-type items have been coded so that a higher mean is better.**

Table 34. Basic Needs: Support from Colleagues and Families—Educator Perceptions

Rate the level of frequency for each of the following.	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
I get the support I need from students' parents or care-givers. (Q6.22_1)	3.27	49.06	35.62	12.05	2.56 (0.76)
Overall, I get the support I need from my general educator colleagues. (Q6.22_2)	1.43	20.33	51.76	26.49	3.03 (0.73)

Rate the level of frequency for each of the following.	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
Overall, I get the support I need from my special educator colleagues. (Q6.22_3)	2.18	22.95	43.72	31.14	3.04 (0.80)

Note **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. None = None of the time, Some = Sometimes, Most = Most of the time, All = All of the time. All Likert-type items have been coded so that a higher mean is better.**

Table 35. Basic Needs: Working Conditions—Educator Perceptions

Rate your level of agreement with each of the following.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
I have adequate knowledge to teach students with and at risk for learning disabilities. (Q6.20_1)	3.89	5.20	5.88	54.18	30.85	4.03 (0.96)
I have adequate resources to teach students with and at risk for learning disabilities. (Q6.20_2)	5.83	13.63	10.03	49.93	20.58	3.66 (1.12)
I have adequate support to teach students with and at risk for learning disabilities. (Q6.20_3)	7.68	15.86	11.46	45.45	19.55	3.53 (1.18)
I have the time I need to use my knowledge, resources, and supports to meet the needs of students with and at	15.14	28.18	12.85	31.32	12.51	2.98 (1.31)

Rate your level of agreement with each of the following.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
risk for learning disabilities. (Q6.20_4)						

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.**

Table 36. Basic Needs: Advocacy—Educator Perceptions

Rate the level of frequency for each of the following.	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
I feel like I can advocate for myself. (Q6.22_4)	1.96	16.83	41.76	39.45	3.19 (0.79)
I feel like I can advocate for my students with learning disabilities. (Q6.22_5)	1.50	17.07	42.03	39.41	3.19 (0.77)

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Not all items may total to 100% due to rounding. None = None of the time, Some = Sometimes, Most = Most of the time, All = All of the time. All Likert-type items have been coded so that a higher mean is better.**

5.2.4 Instructional Resources and Practices

The items in this section were primarily from the Individual Contribution, Knowledge, and Development survey block and included questions related to classroom materials they use, level of comfort implementing specific instructional practices, and perceptions of instructional practices that are relevant to meeting the needs of students with or at risk for LD. As reported in Table 37, 86.57% of respondents use materials from other educators, 85.71% use materials from district or state departments of education, 83.87% use materials from a curriculum they implement, and 74.40% use materials from Teachers Pay Teachers. Conversely, only 20.17% use materials from the What Works Clearinghouse, 29.81% from the evidence for the Every Student Succeeds Act, and 23.26% from the National Center for Improving Intervention.

Table 37. Instructional Resources and Practices: Awareness and Use of Materials

Do you currently use materials from any of the following resources in your classroom?	I'm not aware of this resource. Weighted %	No Weighted %	Yes Weighted %
What Works Clearinghouse (Q7.2_1)	44.19	35.64	20.17
Evidence for Every Student Succeeds Act (ESSA) (Q7.2_2)	36.55	33.65	29.81
National Center for Improving Intervention (NCII) (Q7.2_3)	41.68	35.06	23.26
Council for Exceptional Children Teacher Resource Repository (Q7.2_4)	41.50	33.65	24.85
Materials from other educators (Q7.2_5)	0.92	12.51	86.57
Materials from a professional development training or conference (Q7.2_6)	2.49	17.50	80.01
Materials from district or state departments of education websites (Q7.2_7)	1.80	12.49	85.71
Materials from a curriculum I implement (e.g., iReady, Go Math) (Q7.2_8)	2.45	13.69	83.87
Online educational technology resources or website (e.g., ABC Mouse, Cool Math, News2You) (Q7.2_9)	3.57	24.58	71.86
University research groups (e.g., UFLI, Florida Center for Reading Research) (Q7.2_10)	14.02	30.10	55.89
Teachers Pay Teachers (Q7.2_11)	2.15	23.45	74.40
Social media (e.g., Pinterest) (Q7.2_12)	2.76	44.67	52.57

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each variable or survey item may not total to 100% due to rounding.**

When asked about the instructional practices they implement in their classroom (Table 38), at least 40% of respondents said they modify instruction to align with a student's IEP, provide small group or one-on-one instruction, and implement accommodations daily.

When asked about their role in preparing for and attending IEP meetings (Table 39), 49.01% said they met with the student's general and/or special educator(s) to discuss the student prior to the meeting, 44.93% said they suggested or drafted accommodations or modifications that might benefit the student, and 38.89% said they suggested or drafted academic IEP goals prior to the IEP meeting. During the IEP meeting, 74.00% said they provided an update on student academic progress toward the general education curriculum, 64.98% said they provided input on the student's accommodations or modification in the general education classroom, and 46.94% said they provided an update on student progress toward IEP goals.

Table 38. Instructional Resources and Practices: Classroom Implementation

In a typical week, how often do you...	Not Applicable Weighted %	Never Weighted %	1-2 times per week Weighted %	3-4 times per week Weighted %	Daily Weighted %
Modify instruction to align with a student's IEP (Q7.3_1)	2.28	3.07	24.29	21.26	49.10
Provide small group or one-on-one instruction (Q7.3_2)	1.04	2.56	23.04	27.12	46.24
Implement accommodations (e.g., extra time on assignments or tests) (Q7.3_3)	1.06	0.82	13.94	20.19	63.99
Use online programs or modules (e.g., iReady, iStation, Imagine Learning) to deliver the core curriculum (Q7.3_4)	4.32	18.08	23.47	21.11	33.03
Use online programs or modules (e.g., iReady, iStation, Imagine Learning) to supplement instruction or provide interventions to address specific skill gaps (Q7.3_5)	4.62	8.98	27.08	22.94	36.38

Note **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding.**

Table 39. Instructional Resources and Practices: IEP Meetings

Variable	Weighted %
Think about your role in preparing for an IEP meeting in the past year. Which best describes you? Select all that apply. (Q7.4)	
I scheduled the IEP meeting with the necessary parties (e.g., care-givers, general educators, special educators, school staffing specialist).	27.07
I met with the student's general and/or special educator(s) to discuss this student prior to the IEP meeting.	49.01
I suggested or drafted academic IEP goals.	38.89
I suggested or drafted behavioral or social IEP goals.	33.77
I suggested or drafted transition IEP goals.	21.20
I suggested or drafted accommodations or modifications that might benefit the student.	44.93
None of the above.	18.01
Think about your role during IEP meetings in the past year. Which best describes you? Select all that apply. (Q7.5)	
I led the IEP meeting.	12.82
I provided an update on student academic progress toward the general education curriculum during the IEP meeting.	74.00
I provided input on the student's accommodations or modifications in the general education classroom.	64.98
I provided an update on student progress toward IEP goals during the IEP meeting.	46.94
I attended the IEP meeting, but did not say much.	14.90
I have never attended an IEP meeting.	3.74

Variable	Weighted %
None of the above.	1.72

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Items in this table were select-all-that-apply and may not total to 100%.**

As shown in Table 40, at least 60% of teachers reported feeling very comfortable collaborating with others to make instructional decisions (67.34%), implementing accommodations or modifications (64.99%), and differentiating instruction (60.44%). Conversely, less than 30% of teachers reported feeling very comfortable writing student academic intervention plans (as part of MTSS or RTI; 29.29%) and writing student behavior intervention plans (26.21%).

Table 40. Instructional Resources and Practices: Educator Perceptions—Comfort Implementing Practices

Item	NA Weighted %	VU Weighted %	SU Weighted %	U Weighted %	SC Weighted %	VC Weighted %	Weighted Mean (*SD*)
Differentiating instruction (Q7.10_1)	0.82	1.49	2.09	3.87	31.29	60.44	4.48 (0.81)
Writing student academic intervention plans (as part of MTSS or RTI) (Q7.10_2)	16.20	4.89	9.64	10.81	29.18	29.29	3.82 (1.18)
Writing student behavior intervention plans (Q7.10_3)	16.97	5.10	10.88	10.06	30.78	26.21	3.75 (1.18)
Implementing academic interventions in the general education classroom (Q7.10_4)	2.15	1.17	2.33	4.47	31.79	58.08	4.46 (0.80)
Implementing academic interventions in the special education classroom (Q7.10_5)	15.81	1.96	4.76	6.19	27.31	43.96	4.27 (0.96)
Writing or implementing individualized education programs (IEPs) (Q7.10_6)	15.96	5.93	7.13	8.13	26.07	36.76	3.96 (1.21)
Using student data (including universal screening and progress-monitoring data) to identify skill gaps (Q7.10_7)	1.47	1.54	3.37	6.38	31.55	55.69	4.39 (0.87)
Choosing academic interventions to address students' skill gaps (Q7.10_8)	3.09	1.34	4.83	6.56	36.57	47.61	4.28 (0.89)

Item	NA Weighted %	VU Weighted %	SU Weighted %	U Weighted %	SC Weighted %	VC Weighted %	Weighted Mean (*SD*)
Collaborating with others to make instructional decisions (Q7.10_9)	0.46	1.42	2.08	3.53	25.17	67.34	4.56 (0.79)
Implementing accommodations or modifications (Q7.10_10)	0.95	1.43	1.97	3.26	27.40	64.99	4.54 (0.80)
Utilizing community resources and supports to meet students' academic needs (Q7.10_11)	6.84	2.19	6.94	12.70	35.09	36.25	4.03 (1.01)
Supporting colleagues at my school in meeting the needs of students with learning disabilities (Q7.10_12)	4.11	1.51	3.99	5.56	34.17	50.66	4.34 (0.91)

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Not all items may total to 100% due to rounding. NA = This is not part of my job, VU = Very uncomfortable, SU = Somewhat uncomfortable, U = Undecided, SC = Somewhat comfortable, VC = Very comfortable. All Likert-type items have been coded so that a higher mean is better. Responses where "This is not part of my job" was selected were not included in calculation of mean and SD.**

Table 41 provides information on teachers' confidence implementing practices to support students with LD. At least 50% of educators felt fairly confident or completely confident in their ability to adapt instruction to meet the needs of their students with LD, measure student progress on IEP goals, and use an IEP to provide accommodations.

When asked about the potential benefit of a variety of instructional practices (Table 42), at least 60% of respondents indicated the following practices were very beneficial to support struggling students in the general education classroom: teacher modeling and demonstration (63.70%), scaffolds and supports (62.40%), small group or one-on-one instruction (61.35%), and immediate and corrective feedback (60.42%).

Table 41. Instructional Resources and Practices: Educator Perceptions—Confidence Implementing Practices

Item	NA Weighted %	Not Weighted %	Slight Weighted %	Some Weighted %	Fairly Weighted %	Complete Weighted %	Weighted Mean (*SD*)
I can adapt instruction to meet the needs of students with learning disabilities. (Q7.6_1)	0.89	0.95	4.34	10.84	35.94	47.04	4.25 (0.90)
I can measure student progress on IEP goals. (Q7.6_2)	3.60	2.82	5.04	13.87	33.45	41.22	4.09 (1.01)
I can use an IEP to provide accommodations. (Q7.6_3)	0.75	0.53	2.02	6.47	23.54	66.68	4.55 (0.77)

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Not all items may total to 100% due to rounding. NA = This is not part of my job, Not = Not at all confident, Slight = Slightly confident, Some = Somewhat confident, Fairly = Fairly confident, Complete = Completely confident. All Likert-type items have been coded so that a higher mean is better. Responses where "This is not part of my job" was selected were not included in calculation of mean and SD.**

Table 42. Instructional Resources and Practices: Educator Perceptions—Practices to Support Struggling Students

In your opinion, what is the potential benefit of the following practices in supporting struggling students in the general education classroom?	Not Familiar Weighted %	Not Weighted %	Neutral Weighted %	Some Weighted %	Beneficial Weighted %	Very Weighted %
Reteach (Q7.9_1)	1.10	0.66	2.38	8.88	33.52	53.46
Spiral review or distributed practice (Q7.9_2)	8.26	0.92	3.60	10.30	33.26	43.66
Small group or one-on-one instruction (Q7.9_3)	0.80	0.70	1.50	7.75	27.89	61.35
Peer tutoring (Q7.9_4)	0.62	3.03	7.00	22.17	38.73	28.45
Explicit instruction (Q7.9_5)	1.63	0.80	1.85	6.47	30.24	59.00
Data-based instructional planning (Q7.9_6)	0.77	0.46	2.63	12.47	38.35	45.33
Universal Design for Learning (Q7.9_7)	14.11	1.92	6.25	13.39	30.74	33.59
Project-Based Learning (Q7.9_8)	1.80	2.39	7.02	19.44	35.39	33.96
Scaffolds and supports (Q7.9_9)	0.95	0.63	1.77	6.33	27.92	62.40
Teacher modeling and demonstration (Q7.9_10)	0.56	0.59	1.01	6.26	27.89	63.70

In your opinion, what is the potential benefit of the following practices in supporting struggling students in the general education classroom?	Not Familiar Weighted %	Not Weighted %	Neutral Weighted %	Some Weighted %	Beneficial Weighted %	Very Weighted %
Teacher-guided practice (e.g., I do, we do, you do) (Q7.9_11)	0.73	0.47	2.31	6.89	30.30	59.31
Independent practice (Q7.9_12)	0.37	0.64	2.92	15.02	36.63	44.42
Memorization mnemonics (Q7.9_13)	3.42	3.00	8.16	25.84	33.68	25.90
Guided note-taking or graphic organizers (Q7.9_14)	0.88	1.11	3.58	16.15	37.36	40.92
Student behavior plan (Q7.9_15)	0.65	2.84	5.94	17.23	39.19	34.15
Relevance of content to students (Q7.9_16)	1.25	0.60	3.16	8.89	36.14	49.96
Immediate and corrective feedback (Q7.9_17)	0.62	0.43	1.82	6.18	30.53	60.42
Student-driven instructional goals (Q7.9_18)	2.08	0.79	5.52	14.17	37.73	39.71
High-leverage practices (Q7.9_19)	21.49	0.66	4.63	13.46	28.98	30.79

In your opinion, what is the potential benefit of the following practices in supporting struggling students in the general education classroom?	Not Familiar Weighted %	Not Weighted %	Neutral Weighted %	Some Weighted %	Beneficial Weighted %	Very Weighted %
Evidence-based practices (Q7.9_20)	1.42	0.35	2.32	9.98	35.87	50.04
Teaching self-advocacy (Q7.9_21)	1.83	0.32	2.34	9.71	32.73	53.06
My school or district's core curriculum (Q7.9_22)	0.26	5.44	9.19	24.35	37.85	22.92
Online academic programs (e.g., iReady, iStation, MathNation) (Q7.9_23)	2.24	2.04	6.19	22.03	41.17	26.33

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. Not familiar = I'm not familiar with this practice, Not = Not beneficial, Neutral = Neutral, Some = Somewhat beneficial, Beneficial = Beneficial, Very = Very beneficial.**

Respondents were also asked about how relevant a variety of data or input are in making instructional changes to meet the needs of students with or at risk for LD. As shown in Table 43, 45.82% of educators felt a student's IEP was very relevant in making instructional changes to meet the needs of students with LD, followed by input from parents, families, or caregivers (36.51%).

Table 43. Instructional Resources and Practices: Educator Perceptions—Practices Relevant to Meeting the Needs of Students With or At Risk for LD

How relevant are each of the following in making instructional changes to meet the needs of students with or at risk for LD?	Not Weighted %	Unsure Weighted %	Some Weighted %	Relevant Weighted %	Very Weighted %
Data from formative assessments (e.g., universal screening, unit assessments, benchmark testing, curriculum-based measures) (Q7.8_1)	0.64	2.53	15.85	50.01	30.98
Data from summative or standardized assessments (e.g., state tests) (Q7.8_2)	2.23	3.30	21.18	44.55	28.74
Student learning preferences (e.g., incorporating student interests) (Q7.8_3)	1.77	3.59	21.53	45.82	27.29
Student academic intervention goals (e.g., Tier 2 goals) (Q7.8_4)	1.52	3.62	19.22	48.22	27.42
Individualized Education Program (IEP) (Q7.8_5)	0.46	1.31	12.07	40.34	45.82
Input from colleagues (e.g., special educator, general educator, English language specialist, instructional coach) (Q7.8_6)	0.59	2.39	15.05	50.61	31.36
Input from school leadership (Q7.8_7)	4.51	8.08	31.82	37.13	18.45
Input from district leadership (Q7.8_8)	14.53	12.46	31.09	29.12	12.79
Input from parents, families, or care-givers (Q7.8_9)	0.69	2.53	16.53	43.73	36.51

Note Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. Not = Not relevant at all, Unsure = Undecided, Some = Somewhat relevant, Relevant = Relevant, Very = Very relevant.

5.2.5 Teamwork and Collaboration

The items in this section were primarily from the Teamwork survey block and included questions about frequency and depth of collaboration with different types of colleagues (e.g., general educators, special educators, transition specialists, academic interventionists), and the perceived benefits or impacts of that collaboration.

We first asked educators to select all the ways they collaborate. As shown in Table 44, 61.56% reported they co-plan with another educator, 54.48% ***give*** guidance about meeting the academic needs of a specific student or students, and 53.99% ***ask for*** guidance about meeting the academic needs of a specific student or students.

Respondents were then asked about who they collaborated with (Table 45). Of the respondents who indicated they co-plan with another educator, 89.52% said they co-plan with a general educator and 48.20% said they co-plan with a special educator.

Table 44. Teamwork and Collaboration: Activities and Actions

What does it look like when you collaborate? Select all that apply. (Q8.2)	Weighted %
I co-plan with another educator.	61.56
I co-teach with another educator.	24.36
I give guidance about meeting the academic needs of a specific student or students.	54.48
I ask for guidance about meeting the academic needs of a specific student or students.	53.99
I give guidance about instructional methods to use.	51.96
I ask for guidance about instructional methods to use.	43.10
I observe another educator to improve my instructional practice.	29.82
I allow other educators to observe me.	38.72
Other (Q8.2_10_TEXT) [a]	1.45

What does it look like when you collaborate? Select all that apply. (Q8.2)	Weighted %
None of the above.	0.53

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). This item was select-all-that-apply and may not total to 100%.**

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

Table 45. Teamwork and Collaboration: Activities and Actions—Collaborators

Which activities have you done this year with the following collaborators? Select all that apply.	N/A Weighted %	General Educators Weighted %	Special Educators Weighted %	Transition Weighted %	Academic Weighted %	Service Weighted %
I co-plan with another educator. (Q8.3_1)	1.37	89.52	48.20	9.35	20.09	20.06
I co-teach with another educator. (Q8.3_2)	1.77	60.30	56.48	17.72	12.89	17.56
I give guidance about meeting the academic needs of a specific student or students. (Q8.3_3)	1.37	78.00	54.78	15.53	20.60	28.72
I ask for guidance about meeting the academic needs of a specific student or students. (Q8.3_4)	1.24	63.98	63.69	15.45	30.40	39.35
I give guidance about instructional methods to use. (Q8.3_5)	1.83	84.97	41.16	12.12	15.25	15.34
I ask for guidance about instructional	2.45	72.11	52.75	15.63	29.34	27.18

Which activities have you done this year with the following collaborators? Select all that apply.	N/A Weighted %	General Educators Weighted %	Special Educators Weighted %	Transition Weighted %	Academic Weighted %	Service Weighted %
methods to use. (Q8.3_6)						
I observe another educator to improve my instructional practice. (Q8.3_7)	6.74	70.07	39.81	16.90	16.91	17.06
I allow other educators to observe me. (Q8.3_8)	4.07	85.24	48.65	12.40	24.35	24.54
Other (Q8.3_9) (Q8.3_9_TEXT) [a]	32.23	55.90	33.48	13.35	15.92	27.79

***Note*. Respondents received the items in this table based on their response to Q8.2 (What does it look like when you collaborate?). For example, if respondents who selected "I co-plan with another educator" in Q8.2, they then received Q8.3_1 to indicate who they co-plan with. Percentages represent weighted population estimates using the number of survey respondents who said they participated in a specific collaboration activity in Q8.2. For example, of the respondents who said they co-plan with another educator in Q8.2, 89.52% said they co-plan with a general educator. N/A = Not applicable, Transition = Transition specialist, vocational coordinator, or transition-focused position, Academic = Academic interventionist, Service = Service provider (e.g., SLP, OT, PT, school psychologist, guidance counselor). The items in this table were select-all-that-apply and may not total to 100%.**

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

We then asked about the frequency of collaboration (Table 46) and perceived benefits of this collaboration (Table 47). Of the individuals who said they collaborate with a general educator, 48.64% indicated this collaboration took place weekly and 28.46% daily. Additionally, 40.75% of those that collaborated with a general educator found this collaboration to be beneficial.

Of the individuals who said they collaborate with a special educator, 37.83% collaborated weekly, 27.96% monthly, and 20.97% daily. Additionally, 40.94% of those that collaborated with a special educator described it as beneficial, 32.24% as very beneficial, and 17.31% as somewhat beneficial.

Table 46. Teamwork and Collaboration: Activities and Actions—Frequency of Collaboration by Collaborator

Thinking about this school year, how frequently do you collaborate with each of the following?	Yearly Weighted %	Quarterly Weighted %	Monthly Weighted %	Weekly Weighted %	Daily Weighted %
General educators (Q8.4_1)	1.77	5.59	15.55	48.64	28.46
Special educators (Q8.4_2)	2.52	10.72	27.96	37.83	20.97
Transition specialist, vocational coordinator, or transition-focused position (Q8.4_3)	10.55	17.73	35.23	26.88	9.61
Academic interventionist (Q8.4_4)	4.70	15.17	35.46	37.19	7.47
Service provider (e.g., SLP, OT, PT, school psychologist, guidance counselor) (Q8.4_5)	4.45	15.99	38.86	33.45	7.24

Note. Respondents received the items in this table based on their response to Q8.3_1 through Q8.3_9. For example, if respondents said they co-planned with a general educator in Q8.3_1, they then received Q8.4_1 to indicate how often they collaborate with a general educator. Percentages represent weighted population estimates using the number of survey respondents who said they collaborated with each role. For example, of the respondents who selected "General Educator" in Q8.3_1 through Q8.3_1, 48.64% said they collaborate with a general educator weekly. Each item may not total to 100% due to rounding.

Table 47. Teamwork and Collaboration: Educator Perceptions—Benefits of Collaboration by Collaborator

In general, how beneficial has this collaboration been this year?	Not Weighted %	Neutral Weighted %	Some Weighted %	Beneficial Weighted %	Very Weighted %	Weighted Mean (*SD*)
General educators (Q8.5_1)	2.54	5.52	17.76	40.75	33.43	3.97 (0.99)
Special educators (Q8.5_2)	2.49	7.02	17.31	40.94	32.24	3.93 (0.99)

In general, how beneficial has this collaboration been this year?	Not Weighted %	Neutral Weighted %	Some Weighted %	Beneficial Weighted %	Very Weighted %	Weighted Mean (*SD*)
Transition specialist, vocational coordinator, or transition-focused position (Q8.5_3)	2.99	10.86	25.16	35.75	25.24	3.69 (1.03)
Academic interventionist (Q8.5_4)	4.15	9.97	21.50	39.11	25.26	3.71 (1.05)
Service provider (e.g., SLP, OT, PT, school psychologist, guidance counselor) (Q8.5_5)	2.86	9.75	23.06	37.49	26.85	3.76 (1.03)

Note. **Respondents received the items in this table based on their response to Q8.3_1 through Q8.3_9. For example, if respondents said they co-planned with a general educator in Q8.3_1, they then received Q8.5_1 to indicate how beneficial they believe collaboration with general educators has been. Percentages represent weighted population estimates using the number of survey respondents who said they collaborated with each role. For example, of the respondents who selected "General Educator" in Q8.3_1 through Q8.3_1, 40.75% said they found this collaboration to be beneficial. Each item may not total to 100% due to rounding. Not = Not beneficial, Neutral = Neutral, Some = Somewhat beneficial, Beneficial = Beneficial, Very = Very beneficial. All Likert-type items have been coded so that a higher mean is better.**

When asked about supports for collaboration (Table 48), 53.45% agreed they have a colleague at their school who provides guidance on intensifying instruction for students who struggle academically and 49.86% agreed they have a colleague at their school who has expertise in students with or at risk for LD that they rely on.

Table 48. Teamwork and Collaboration: Educator Perceptions—Supports for Collaboration

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
I have a colleague at my school who provides guidance on intensifying	4.17	11.15	11.65	53.45	19.57	3.73 (1.02)

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
instruction for students who struggle academically. (Q8.7_1)						
I have a colleague at my school who has expertise in students with or at risk for learning disabilities that I rely on. (Q8.7_2)	4.66	9.95	10.52	49.86	25.00	3.81 (1.05)
I am happy with the level of collaboration I have with my colleagues. (Q8.7_3)	3.24	9.75	12.91	49.09	25.01	3.83 (1.01)
My school leadership wants teachers at my school to collaborate. (Q8.7_4)	1.77	2.72	6.48	48.16	40.86	4.24 (0.84)
My school leadership provides the necessary supports for me to collaborate with my colleagues. (Q8.7_5)	4.68	12.41	15.19	44.22	23.51	3.69 (1.09)

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.**

5.2.6 Teamwork and Collaboration: General Educator Perceptions of Their Special Education Colleagues

The items in this section were from the Teamwork survey block and asked general educators about their perceptions of their special education colleagues, including how consistently they

believe their special education colleagues perform certain tasks or instructional practices and their working relationships with their special education colleagues. Special educators were asked a series of similar questions that are reported in the next section.

As presented in Table 49, 33.04% of general educators felt their special education colleagues valued their input very consistently and 32.24% of general educators felt their special education colleagues made instructional decisions aligned with student IEP goals very consistently.

Further, 55.26% of general educators agreed they know how to discuss topics related to disability and special education with their special education colleagues and 55.19% agreed they talk to the special education teacher if they have concerns about a student's IEP (Table 50).

Table 49. Teamwork and Collaboration: General Educator Perceptions of Special Education Colleagues—Consistency of Services and Supports

Rate how consistently your special education colleagues do each of the following. Overall, the special education teachers at my school...	Not Weighted %	Some Weighted %	Consistent Weighted %	Very Weighted %	Mean (*SD*)
Meet the academic needs of all their students (Q8.9_1)	8.51	31.69	38.95	20.84	2.72 (0.88)
Meet the behavioral needs of all their students (Q8.9_2)	10.53	33.77	37.14	18.56	2.64 (0.91)
Are competent working with students with learning disabilities (Q8.9_3)	4.98	24.05	41.53	29.43	2.95 (0.84)
Are open to collaboration (Q8.9_4)	4.28	22.82	42.47	30.43	2.99 (0.84)
Make instructional decisions aligned with student IEP goals (Q8.9_5)	3.56	19.65	44.55	32.24	3.05 (0.80)
Value my input (Q8.9_6)	4.21	20.16	42.60	33.04	3.04 (0.83)
Act on my input (Q8.9_7)	7.16	29.15	39.86	23.82	2.80 (0.88)

Rate how consistently your special education colleagues do each of the following. Overall, the special education teachers at my school...	Not Weighted %	Some Weighted %	Consistent Weighted %	Very Weighted %	Mean (*SD*)
Understand my specialized role, expertise, and responsibilities (Q8.9_8)	6.33	23.61	42.79	27.27	2.91 (0.86)
Help my job feel more manageable (Q8.9_9)	13.36	28.69	35.12	22.82	2.67 (0.96)
Help me meet the needs of students with learning disabilities in my classroom (Q8.9_10)	11.04	27.11	37.65	24.21	2.75 (0.93)

Note. Items in this table were only given to respondents who reported "General Educator" as their current role in Q2.6. Percentages represent weighted population estimates based on our survey sample of K-12 general educators (*n* = 1,130). Each item may not total to 100% due to rounding. Not = Not at all consistently, Some = Somewhat consistently, Consistent = Consistently, Very = Very consistently. All Likert-type items have been coded so that a higher mean is better.

Table 50. Teamwork and Collaboration: General Educator Perceptions of Special Education Colleagues—Communication and Collaboration

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
At my school, collaborating with special educators benefits students with learning disabilities. (Q8.10_1)	2.65	3.45	14.31	51.09	28.50	3.99 (0.89)
At my school, we (special and general educators) have common teaching philosophies for teaching students with learning	3.45	7.77	16.25	51.01	21.51	3.79 (0.98)

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
disabilities. (Q8.10_2)						
I know how to discuss topics related to disability and special education with my special education colleagues at my school. (Q8.10_3)	1.84	4.61	11.02	55.26	27.27	4.02 (0.85)
I talk with my special education colleagues when a student's IEP is not being implemented correctly. (Q8.10_4)	2.14	7.96	14.56	51.63	23.70	3.87 (0.93)
I talk to the special education teacher if I have concerns about a student's IEP. (Q8.10_5)	1.41	3.42	6.50	55.19	33.47	4.16 (0.78)

***Note*. Items in this table were only given to respondents who reported "General Educator" as their current role in Q2.6. Percentages represent weighted population estimates based on our survey sample of K-12 general educators (*n* = 1,130). Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.**

5.2.7 Teamwork and Collaboration: Special Educator Perceptions of Their General Education Colleagues

The items in this section mirrored the items that were given to general educators. However, these items asked special educators about their perceptions of their general education colleagues.

As indicated in Table 51, 30.76% of special educators felt their general education colleagues very consistently value their input and 26.37% felt their general education colleagues very consistently understand their specialized role, expertise, and responsibilities.

Further, 52.61% of special educators agreed they talk with their general education colleagues when a student's IEP is not being implemented correctly and 50.66% agreed they talk to the general education teacher if they have concerns about a student's IEP (Table 52).

Table 51. Teamwork and Collaboration: Special Educator Perceptions of General Education Colleagues—Consistency of Services and Supports

Rate how consistently your general education colleagues do each of the following. Overall, the general education teachers at my school...	Not Weighted %	Some Weighted %	Consistent Weighted %	Very Weighted %	Mean (*SD*)
Meet the academic needs of all their students (Q8.12_1) [a]	5.24	29.45	44.51	20.80	2.81 (0.82)
Meet the behavioral needs of all their students (Q8.12_2) [a]	8.01	36.96	36.18	18.85	2.66 (0.88)
Are competent working with students with learning disabilities (Q8.12_3) [a]	7.92	37.44	32.32	22.31	2.69 (0.91)
Are open to collaboration (Q8.12_4) [b]	3.93	35.01	39.61	21.45	2.79 (0.82)
Make instructional decisions aligned with student IEP goals (Q8.12_5) [a]	9.21	34.42	36.37	19.99	2.67 (0.89)
Value my input (Q8.12_6) [a]	1.30	25.31	42.63	30.76	3.03 (0.77)
Act on my input (Q8.12_7) [a]	5.97	34.72	39.08	20.22	2.74 (0.84)
Understand my specialized role, expertise, and responsibilities (Q8.12_8) [a]	3.92	26.59	43.12	26.37	2.92 (0.81)
Help my job feel more manageable (Q8.12_9) [a]	9.48	27.45	38.25	24.82	2.78 (0.91)

***Note*. Items in this table were only given to respondents who reported "Special Educator" as their current role in Q2.6. Each item may not total to 100% due to rounding. Not = Not at all consistently, Some = Somewhat consistently, Consistent = Consistently, Very = Very consistently. All Likert-type items have been coded so that a higher mean is better.**

[a] Percentages represent weighted population estimates based on our survey sample of K-12 special educators who received this survey item (*n* = 392).

[b] Percentages represent weighted population estimates based on our survey sample of K-12 special educators who received this survey item (*n* = 300).

Table 52. Teamwork and Collaboration: Special Educator Perceptions of General Education Colleagues—Communication and collaboration

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
At my school, collaborating with general educators benefits students with learning disabilities. (Q8.13_1)	2.02	1.56	10.05	50.23	36.14	4.17 (0.83)
At my school, we (general and special educators) have common teaching philosophies for teaching students with learning disabilities. (Q8.13_2)	2.61	9.64	15.52	50.51	21.72	3.79 (0.98)
I know how to discuss topics related to disability and special education with my general education colleagues at my school. (Q8.13_3)	2.72	1.27	6.71	50.19	39.11	4.22 (0.86)
I talk with my general education colleagues when a student's IEP is not being implemented correctly. (Q8.13_4)	2.68	3.32	6.67	52.61	34.72	4.13 (0.86)

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
I talk to the general education teacher if I have concerns about a student's IEP. (Q8.13_5)	1.84	1.72	4.52	50.66	41.27	4.28 (0.78)

***Note*. Items in this table were only given to respondents who reported "Special Educator" as their current role in Q2.6. Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better. Some K-12 special educators within our sample did not receive these items, potentially due to issues with accessing the survey on a school district network. Percentages represent weighted population estimates based on our survey sample of K-12 special educators who received these survey items (*n* = 392).**

5.2.8 Inclusion, Stress, and Resilience

The items in this section were primarily from the Inclusion, Stress, and Resilience survey block and included questions about general working conditions, beliefs about the public education system, and meeting the needs of students with LD.

The Educator Survey asked two open response questions related to inclusion: "How would you define an ideal inclusion model?" (Q9.2) and "What does your school's inclusion model look like?" (Q9.3). Both items were required to answer and respondents needed to enter at least two characters. Because both items asked about inclusion, many of the themes overlapped.

Item Q9.2 (How would you define an ideal inclusion model?) is presented in Tables 53-54 where Table 53 provides the themes and example data points and Table 54 presents the percentage of data points grouped under each theme for general educators, special educators, and all respondents. Additionally, Appendix F in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025) contains the individual data units that fell under each theme.

Item Q9.3 (What does your school's inclusion model look like?) is presented in Tables 55-56 where Table 55 provides the themes and example data points and Table 56 presents the percentage of data points grouped under each theme for general educators, special educators, and all respondents. The individual data units that fell under each theme can be found in Appendix G in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025).

Table 53. Inclusion: Thematic Coding—Ideal Inclusion Model

Theme	Example Data Points
Students with Disabilities in the General Education Classroom	Responses centered on having a mix of students with and without disabilities in the general education classroom, with some respondents providing additional detail, such as SWD held to the same academic expectations and standards. • *Students in the general education classroom with the supports they need in place* • *Where students with LD are welcome into the Gen. Ed classroom. The Gen. Ed teacher makes accommodations to support students with LD.*
Supports for Students with Disabilities within the General Education Classroom	Responses included co-teaching, instructional practices, push-in and/or pull-out models, and tiered supports. • *Providing multiple ways of learning* • *Working/ co teaching with special education teacher* • *I would like for the classroom to be co-taught everyday all day so that the students are better supported.*
Barriers and Facilitators for Implementation of Inclusion	Responses included appropriate curriculum, class sizes or caseload sizes, school climate, shared accountability, time, and training. • *No more than 15 students in a class, rotation stations, and one on one individualized help.* • *Enough time and resources to help all students that have special needs including differentiating for their abilities* • *A model where the ESE teacher would have as much responsibility as I do for these students.* • *Ideally, my classes with numerous students with disabilities would be smaller so that I could focus on their needs more effectively and individually.*
Caveats to Inclusion	Responses included self-contained settings and students included in general education settings unless behavior became an issue. • *An ideal inclusion model looks like the least restrictive environment for the student with a disability, while also not compromising the learning outcomes of other students.* • *Students who demonstrate appropriate behavior (not grossly disruptive and/or aggressive) and who would benefit academically* • *Students are only included in the general classroom if they can keep up with the pacing and rigor of the class.*

Theme	Example Data Points
Effects of Inclusion	Responses included the effects, benefits, or impacts of inclusion such as leveling the playing field and equal access to educational opportunities. • *Where every child feels welcomed, successful and has friends in the classes.* • *An ideal inclusion model ensures that all students, regardless of abilities or disabilities, have equal access to educational opportunities and resources.* • *Leveling the playing field for SWD*
Characteristics of an Ideal Inclusion Model	Responses centered on intentionality and other characteristics of parameters of inclusion. • *A powerful law assuring that all disability children will be provided with appropriate education* • *Starts in kindergarten continues through 12th grade.* • *It needs to be realistic, otherwise everyone will suffer.* • *A true model and not, throw all special needs into the general population.*
Inclusion is not the right model	Responses included whether respondents have seen or experienced an ideal inclusion model and whether they believed inclusion was the right model. • *The most amount of time spent in the general education class that supports the learning of the student. It is important to realize that a child who is so far behind may not benefit from full inclusion and may need a remediation class.* • *I do not believe inclusion is the correct model. It has led to complete burn out on my part with 17 of 44 students having labels.*
Excluded from Analysis	Responses were excluded if they were incomplete or a nonanswer or indicates they were unsure. • *N/A* • *I am not sure that I understand what that model would look like at this time, because of the changes in education.*

***Note*. All data points grouped under each theme can be found in Appendix F in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025).**

Table 54. Thematic Coding: Ideal Inclusion Model—Delineated by Role

Theme	General Educator *n* (%) [a]	Special Educator *n* (%) [b]	All *n* (%) [c]
Students with Disabilities in the General Education Classroom	277 (24.51)	126 (24.05)	403 (24.37)
Supports for Students with Disabilities within the General Education Classroom	485 (42.92)	184 (35.11)	669 (40.45)
Barriers and Facilitators for Implementation of Inclusion	45 (3.98)	29 (5.53)	74 (4.47)
Caveats to Inclusion	29 (2.57)	10 (1.91)	39 (2.36)
Effects of Inclusion	185 (16.37)	131 (25.00)	316 (19.11)
Characteristics of an Ideal Inclusion Model	11 (0.97)	7 (1.34)	18 (1.09)
Inclusion is not the right model	11 (0.97)	4 (0.76)	15 (0.91)
Excluded from Analysis	87 (7.70)	33 (6.30)	120 (7.26)

[a] *n* refers to the number of responses to Q9.2 that were provided by general educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by general educators by the total number of general educator respondents (n = 1,130). For example, 24.51% of general educator respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.2.

[b] *n* refers to the number of responses to Q9.2 that were provided by special educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by special educators by the total number of special educator respondents (n = 524). For example, 24.05% of special educator respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.2.

[c] *n* refers to the number of responses to Q9.2 that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses to Q9.2 classified under each theme by the total number of Educator Survey respondents (n = 1,654). For example, 24.37% of Educator Survey respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.2.

Table 55. Inclusion: Thematic Coding—School's Inclusion Model

Theme	Example Data Points
Students with Disabilities in the General Education Classroom	Responses centered on having a mix of students with and without disabilities in the general education classroom, with some respondents providing additional detail, such as SWD held to the same academic expectations and standards. • *My school has full inclusion and allows for students with accommodations to be pulled out by specialists when applicable. MTSS for behavior is adopted when all other strategies have not been successful.* • *We start with inclusion in small increments and work on them getting use to a full day in a "regular" classroom. We take it slow at first and gauge how they are doing and add more time on.* • *All students in General education classrooms with a variety of levels.*
Supports for Students with Disabilities within the General Education Classroom	Responses included co-teaching, instructional practices, push-in and/or pull-out models, and tiered supports. • *we have one para and small class sizes* • *Students who are identified part of the Exceptional Student Education (ESE) program are included in general education classrooms. The Special Education Teacher either pulls out students or push in to support students on their goals.* • *Every classroom has a general education teacher, special education teacher and paraprofessional. They spend the whole day in the same class. The co-teach, co-plan*
Barriers and Facilitators for Implementation of Inclusion	Responses included class sizes or caseload sizes, school climate, shared accountability, time, and training. • *Teachers have special education backgrounds and expertise.* • *More than 1/3 of my students in any one class are special needs. One class has over 60% ESE.* • *Inconsistent model, often overcrowded and overpopulated classrooms*
Caveats to Inclusion	Responses included self-contained settings and students included in general education settings unless behavior became an issue. • *Currently, my school's inclusion model focuses more on the involving students with their peers more than helping students achieve academic success.* • *Special needs kids included with gen ed for lunch, assembly, and recess. Special ed in gen ed classes when possible or when parent insists*

Theme	Example Data Points
	• *Our inclusion model is a bit messy. Students with big behavior needs are oftentimes clumped together in their schedules - so there's inclusion HAPPENING, but these students sometimes take away from others in the classroom. The para is a help, but there's no coteaching.*
Effects of Inclusion	Responses included the effects, benefits, or impacts of inclusion such as leveling the playing field and equal access to educational opportunities. • *All students at my school are given equal opportunities.* • *An inclusive classroom where all students have equal access and opportunities for success. Students with disabilities are fully integrated into the classroom.* • *My school adapts curriculum for students based on their individual needs.*
Impression of school's inclusion model	Responses centered on respondents' impressions of their school's inclusion model, including intentionality, supports, and effectiveness. • *Unfortunately, my school does a very poor job at inclusion. General education teachers have no idea how to support their students with IEPs and students in self-contained classrooms are ignored by administration.* • *My school makes it a top priority* • *Honestly? Kind of like babysitting.* • *We do not have an inclusion model to date.*
Excluded from Analysis	Responses were excluded if they were incomplete or a nonanswer or indicates they were unsure. • *Unable to define* • *N/A*

***Note*. All data points grouped under each theme can be found in Appendix G in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025).**

Table 56. Thematic Coding: School's Inclusion Model—Delineated by Role

Theme	General Educator *n* (%) [a]	Special Educator *n* (%) [b]	All *n* (%) [c]
Students with Disabilities in the General Education Classroom	262 (23.19)	89 (16.98)	351 (21.22)
Supports for Students with Disabilities within the General Education Classroom	557 (49.29)	240 (45.80)	797 (48.19)
Barriers and Facilitators for Implementation of Inclusion	47 (4.16)	28 (5.34)	75 (4.53)
Caveats to Inclusion	19 (1.68)	20 (3.82)	39 (2.36)
Effects of Inclusion	94 (8.32)	59 (11.26)	153 (9.25)
Impression of school's inclusion model	60 (5.31)	39 (7.44)	99 (5.99)
Excluded from Analysis	91 (8.05)	49 (9.35)	140 (8.46)

[a] ***n*** **refers to the number of responses to Q9.3 that were provided by general educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by general educators by the total number of general educator respondents (n = 1,130). For example, 23.19% of general educator respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.3.**

[b] ***n*** **refers to the number of responses to Q9.3 that were provided by special educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by special educators by the total number of special educator respondents (n = 524). For example, 16.98% of special educator respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.3.**

[c] ***n*** **refers to the number of responses to Q9.3 that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses to Q9.3 classified under each theme by the total number of Educator Survey respondents (n = 1,654). For example, 21.22% of Educator Survey respondents mentioned something related to "Students with Disabilities in the General Education Classroom" in response to Q9.3.**

When asked to select three factors that impact their ability to implement their school's inclusion model (Table 57), 36.19% selected "lack of planning time", 31.74% selected "too many students with significant academic needs in my classroom", and 30.47% selected "class schedules".

When asked to select three factors that are helpful in meeting the academic needs of students with and at risk for disabilities (Table 58), nearly half selected "administrators who respect teacher expertise and autonomy" (47.84%), followed by "planning time" (36.70%) and "hiring and retaining enough staff" (28.83%).

Table 57. Inclusion: Factors Negatively Impacting Inclusion

Which three factors most impact your ability to implement your school's inclusion model? (Q9.4)	Weighted %
Inclusion is not a priority to my general education colleagues.	10.67
Inclusion is not a priority to my special education colleagues.	8.02
Inclusion is not a priority to my administrators.	9.60
Inclusion is not a priority to my district.	7.02
Lack of planning time	36.19
Lack of resources	29.22
Class schedules	30.47
Insufficient training	14.94
Too many administrative tasks (e.g., paperwork)	26.96
Too many students with significant academic needs in my classroom	31.74
Too many students with learning disabilities in my classroom or too many direct service hours on my students' IEPs	19.85
Interpersonal relationships	4.19
Lack of support staff	25.86
Student behavior	26.93

Which three factors most impact your ability to implement your school's inclusion model? (Q9.4)	Weighted %
Other (Q9.4_15_TEXT) [a]	2.59
None of the above.	5.26

Note. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Respondents were directed to select three options from the given list; item may not total to 100%.

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

Table 58. Inclusion: Factors Helpful in Meeting the Needs of Students With or At Risk for Learning Disabilities

What three factors do you find most helpful in meeting the academic needs of students with and at risk for learning disabilities? (Q9.11)	Weighted %
Administrators who prioritized school-based models (e.g., MTSS, RTI, PBIS)	17.70
Administrators who respect teacher expertise and autonomy	47.84
Administrators who hold teachers accountable	15.22
Hiring and retaining enough staff	28.83
Reduced administrative tasks not directly related to instruction	27.10
Clear roles and responsibilities among staff and faculty	14.77
Access to training or professional development on tracking and using student data	11.54
Planning time	36.70
Collaboration between general and special educators (e.g., co-planning, co-teaching, co-assessing, co-development of an IEP)	25.10
Skilled personnel (e.g., paraprofessionals, interventionists, teachers)	21.83

What three factors do you find most helpful in meeting the academic needs of students with and at risk for learning disabilities? (Q9.11)	Weighted %
Supportive and involved families	21.98
Incorporating students' strengths in the classroom	5.23
Evidence-based practices	7.10
High-quality academic interventions	11.23
Closing the gap between research and practice	3.38
Assistive technology resources	2.05
Other (Q9.11_30_TEXT) [a]	1.00
None of the above.	0.47

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Respondents were directed to select three options from the given list; item may not total to 100%.**

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

When asked about students with LD in inclusive classroom settings (Table 59), over 60% of respondents agreed or strongly agreed that, with appropriate supports, students with LD can progress at the same rate as their peers when in inclusion classrooms.

When asked about the effectiveness of the public education system (Table 60), 48.78% of respondents indicated the public education system is effective at meeting the instructional needs of students ***without*** disabilities, compared to 27.89% of respondents that indicated the public education system is effective at meeting the instructional needs of students ***with*** disabilities. Similarly, 39.07% of respondents indicated the public education system is effective at preparing students ***without*** disabilities for life after high school, while only 24.07% of respondents indicated the public education system is effective at preparing students ***with*** disabilities for life after high school.

Table 59. Inclusion: Educator Perceptions—Students with LD in Inclusive Classroom Settings

Rate your level of agreement with each of the following.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
With appropriate supports, students with learning disabilities can progress at the same rate as their peers when in inclusion classrooms. (Q9.5_1)	2.88	11.44	16.07	51.96	17.65	3.70 (0.98)
Inclusion impedes the learning of students performing at or above grade level. (Q9.5_2) [a]	9.57	33.23	19.36	24.87	12.97	3.02 (1.23)
Students with learning disabilities learn most effectively when placed in a separate setting with peers requiring similar intensive instruction. (Q9.5_3) [a]	7.21	27.40	23.83	28.13	13.42	2.87 (1.19)
My school leadership has systems in place to support inclusion classrooms. (Q9.5_4)	5.73	12.31	18.53	46.51	16.92	3.57 (1.08)

Note. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.

[a] Item was reverse coded.

Table 60. Inclusion: Educator Perceptions—Effectiveness of Public Education System

Variable	I Weighted %	U Weighted %	SE Weighted %	E Weighted %	VE Weighted %	Weighted Mean (*SD*)
Thinking about students WITHOUT disabilities, rate how effective our public education system is in:						
Meeting the instructional needs of students WITHOUT disabilities (Q9.12_1)	5.41	3.06	27.90	48.78	14.85	3.40 (1.19)
Preparing students WITHOUT disabilities for life after high school (Q9.12_2)	7.38	6.38	31.88	39.07	15.29	3.23 (1.26)
Thinking about students WITH disabilities, rate how effective our public education system is in:						
Meeting the instructional needs of students WITH disabilities (Q9.13_1)	12.75	8.55	41.41	27.89	9.41	2.80 (1.26)
Preparing students WITH disabilities for life after high	16.55	16.11	32.96	24.07	10.30	2.79 (1.29)

Variable	I Weighted %	U Weighted %	SE Weighted %	E Weighted %	VE Weighted %	Weighted Mean (*SD*)
school (Q9.13_2)						

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. I = Ineffective, U = Unsure, SE = Somewhat effective, E = Effective, VE = Very effective. All Likert-type items have been coded so that a higher mean is better.**

When asked about factors contributing to job-related stress (Table 61), 54.84% of respondents selected "student behavior, attitudes, or motivation" and 37.85% selected "too many students with significant academic needs in my class."

Table 61. Stress and Resilience: Factors Contributing to Job-Related Stress

Which factors most contribute to your job-related stress? Select up to three. (Q9.8)	Weighted %
Impact of student achievement on teacher evaluation and salary	25.23
Too many students with significant academic needs in my class	37.85
Large class or caseload	27.95
Student behavior, attitudes, or motivation	54.84
Students bullying each other	9.23
Paperwork	24.77
Colleague attitudes, priorities, or communication	12.17
Administrator attitudes, priorities, or communication	15.63
Too many responsibilities related to school-level initiatives (e.g., MTSS, PBIS, SEL)	20.89
Resource constraints	11.25

Which factors most contribute to your job-related stress? Select up to three. (Q9.8)	Weighted %
Pressures from student care-givers or families	5.68
School safety	3.53
School board or local politics or policies	10.41
State politics or policies	10.93
Federal politics or policies	2.07
Other (Q9.8_16_TEXT) [a]	2.62
None of the above.	1.04

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Respondents were directed to select three options from the given list; item may not total to 100%.**

[a] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

All respondents received the open-response question asking about factors that help them be resilient when addressing the academic needs of students with and at risk for learning disabilities (Q9.9). This question was required to answer and respondents needed to enter at least two characters. Table 62 represents the seven themes that were developed from the analysis as well as example data points that were coded under that theme. Table 63 provides the percentage of data points grouped under each theme for general educators, special educators, and all respondents. Appendix H in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025) details the individual data units that fell under each code.

Table 62. Stress and Resilience: Thematic Coding—Factors Contributing to Resilience

Theme	Example Data Points
Facilitators that Make My Job Easier or Better	Responses were grouped into five subthemes: (1) Materials, Training, Experience, Time; (2) Relationships and Communication; (3) Safe or Supportive School Culture; (4) Students Ready to Learn, Support from Students' Families; and (5) School, District, or State Funding or Policies.

Theme	Example Data Points
	• *Enough support staff* • *Enough resources/time to be able to meet their needs* • *Time to collaborate with other educators at my school* • *Positive relationships with students* • *A supportive school culture that values inclusion* • *Colleagues I can go to for guidance and support* • *Students who care*
Character Traits	Responses centered around the attitude or characteristics educators have. • *Confidence* • *Determination* • *Patience* • *Flexibility* • *Persistence* • *Determination*
Actions I Can Take	Responses focused on asking for help, being proactive, putting in hard work, setting realistic goals or expectations, and engaging in reflection. • *Being prepared* • *Setting realistic goals and celebrating small wins* • *Reflecting on the day and knowing I did my best or how I could change it the next day* • *Asking for help*
Mindset	Responses focused on the mindset or outlook, such as focusing on the things they can influence and not taking things personally. • *Understanding that I am just one part of the child's overall academic journal (not everything is solely on my shoulders)* • *Having a positive mindset* • *Understanding that not every day will be successful* • *Not taking things personally* • *Tapping into the mindset that I can't fix everything/everyone because I am one person and doing the best I can* • *Control what I can control*
Being Appreciated, Recognized or Trusted	Responses focused on autonomy to do their job; being respected; and receiving praise, recognition, encouragement, or feedback.

Theme	Example Data Points
	• *Positive feedback from students, parents, and colleagues* • *Teachers telling me that I'm making a differences* • *Students say my class is their favorite class* • *Being given freedom to choose how I teach standards* • *Autonomy to make decisions about my program and instruction*
Well-being	Responses under the "Well-being" theme included having something to look forward to, having a manageable workload, self-care, having a work-life balance, and having support from family, friends, or community. • *Maintaining a work-life balance* • *Knowing my boundaries* • *Self-care and leaving work at work* • *Time to decompress and gather my thoughts* • *My family and friends*
Things that Keep Me Going	Responses under this theme included passion for students or teaching, finding their sense of purpose in teaching, seeing students succeed, wanting to make a difference, and seeing themselves become better teachers. • *Seeing students try their best* • *Seeing progress no matter how small* • *The joy I feel when a "light bulb" moment happens for my kids* • *I recognize my own professional growth as a SPED teacher* • *Knowing I'm making an impact* • *Remembering my "why"* • *Wanting to personally see my students I have formed relationships with, come back and show me their success and happiness in life!* • *Job security*
Excluded from Analysis	Responses excluded from analysis included incomplete or nonanswers or unsure responses. • *N/A* • *This is a weird question, IDK what else to say here* • *I don't know* • *none*

***Note*. All data points grouped under each theme can be found in Appendix H in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025).**

Table 63. Thematic Coding: Factors Contributing to Resilience—Delineated by Role

Theme	General Educator *n* (%) [a]	Special Educator *n* (%) [b]	All *n* (%) [c]
Facilitators that Make My Job Easier or Better	1,251 (36.90)	519 (33.02)	1,770 (35.67)
Character Traits	546 (16.11)	347 (22.07)	893 (18.00)
Actions I Can Take	102 (3.01)	63 (4.01)	165 (3.33)
Mindset	83 (2.45)	45 (2.86)	128 (2.58)
Being Appreciated, Recognized, or Trusted	71 (2.09)	40 (2.54)	111 (2.24)
Well-being	380 (11.21)	163 (10.37)	543 (10.94)
Things that Keep Me Going	775 (22.86)	306 (19.47)	1,081 (21.79)
Excluded from Analysis	182 (5.37)	89 (5.66)	271 (5.46)

[a] ***n*** **refers to the number of individual data units that were provided by general educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of data units classified under each theme that were provided by general educators by the total number of data units that were recorded from general educator respondents (n = 3,390). For example, 55.31% of data units from general educator respondents were coded under "Facilitators that Make My Job Easier or Better."**

[b] ***n*** **refers to the number of individual data units that were provided by special educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of data units classified under each theme that were provided by special educators by the total number of data units that were recorded from special educator respondents (n = 1,572). For example, 21.38% of data units from special educator respondents were coded under "Facilitators that Make My Job Easier or Better."**

[c] ***n*** **refers to the number of individual data units that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of data units classified under each theme by the total number of data units that were recorded (n = 4,962). For example, 76.69% of data units were coded under "Facilitators that Make My Job Easier or Better."**

When asked about their motivation and beliefs about the impact they can have (Table 64), 45.31% of respondents agreed they are motivated to teach struggling students because they want to help them learn, 36.89% agreed they are motivated to teach struggling students because they have or are personally connected to someone who struggled in school or had LD, and 47.46% agreed they can make a difference in the learning of struggling students or students with LD.

When asked to think about their teaching this year (Table 65), 59.89% of respondents felt good about their teaching most of the time, 24.80% some of the time, and 14.10% all of the time.

Table 64. Resilience: Educator Perspectives—Motivations and Beliefs

Rate your level of agreement with each of the following statements.	S Weighted %	D Weighted %	U Weighted %	A Weighted %	SA Weighted %	Weighted Mean (*SD*)
I am motivated to teach struggling students because I want to help them learn. (Q9.6_1)	1.21	2.05	5.99	45.31	45.43	4.32 (0.78)
I am motivated to teach struggling students because I have or am personally connected to someone who struggled in school or had a learning disability. (Q9.6_2)	5.95	18.36	9.50	36.89	29.30	3.65 (1.22)
I can make a difference in the learning of struggling students or students with learning disabilities. (Q9.6_3)	1.14	0.84	5.77	47.46	44.79	4.34 (0.74)

***Note*. Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. S = Strongly disagree, D = Disagree, U = Undecided, A = Agree, SA = Strongly agree. All Likert-type items have been coded so that a higher mean is better.**

Table 65. Resilience: Educator Perspectives—Teaching Self-Efficacy and Well-being

Variable	None Weighted %	Some Weighted %	Most Weighted %	All Weighted %	Weighted Mean (*SD*)
Thinking about this year, how often do you feel good about your teaching? (Q9.7)	1.21	24.80	59.89	14.10	2.87 (0.66)

Note. **Percentages represent weighted population estimates based on our survey sample of K-12 educators (*n* = 1,654). Each item may not total to 100% due to rounding. None = None of the time, Some = Some of the time, Most = Most of the time, All = All of the time. All Likert-type items have been coded so that a higher mean is better.**

The last item on the Educator Survey asked respondents "Is there anything else you think we should know about your needs in teaching students with learning disabilities?" (Q10.1). This question was required to answer and respondents needed to enter at least two characters. Table 66 presents the themes and example data points that were developed from deductive and inductive analysis. Importantly, some data points contained more than one theme. For example, the data point "Teachers can be the best ever, but without TIME to plan and the resources to use; they are just a teacher. We can't perform magic tricks & we have families that deserve our attention when we get off just like every other profession. Time and resources are at the top, but support of admin/district is also a must" contained the Supports and Facilitators theme as well as the Educator Well-being, Motivation, or Character Traits theme.

Table 67 provides the percentage of data points grouped under each theme for general educators, special educators, and all respondents. Percentages represent unweighted estimates and may total over 100% as some responses contained more than one theme. For example, the data point "Teachers can be the best ever, but without TIME to plan and the resources to use; they are just a teacher. We can't perform magic tricks & we have families that deserve our attention when we get off just like every other profession. Time and resources are at the top, but support of admin/district is also a must" was counted twice: once under the Supports and Facilitators theme and once under the Educator Well-being, Motivation, or Character Traits theme.

Appendix I in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025) contains the individual data units that fell under each theme.

Table 66. Thematic Coding—Additional Information

Theme	Example Data Points
Student Needs, Behavior, Effort, or Impact	Responses under this theme focused on student attitude, behavior, effort, or needs and the impact on students. • *I feel that our regular Ed students get put in the sidelines when too many 504 and IEP students are placed in one classroom, under one teacher with little support. Also, pull out teachers should be monitored the same as regular Ed teachers and be held accountable.* • *The most challenging aspect of teaching students with learning disabilities is providing support for the behaviors that these students often exhibit. There are resources for teaching the academics, but it is extremely difficult to manage the behaviors within the general education classroom environment. There is little support or guidance to help in this area which affects all student learning.* • *Behaviors are so bad (from general and special education students) that it takes priority over academics. Students are behind because we spend so much time catering to behavioral plans that are destined to fail.*
Students with Learning Disabilities	Responses under this theme focused on students with LD and the process for identifying LD. • *I do not feel confident in my abilities to work effectively with students with disabilities. I need more training and would love some mentoring from those who do it well. I do not feel our ESE department (staff or admin) helps our students with disabilities succeed. Although their hearts are in the right place, they (ESE) often coddle students and begin a lot of sentences with, "Student X can't do that because..." It's very frustrating because I want my students with learning disabilities to know that they can succeed and progress without the non-learning supports.* • *I feel the number of students with LD is growing and the number of good teachers is dropping. The pay is minimum but the workload is growing.*
Educator Well-being, Motivation, or Character Traits	Responses focused on teacher well-being and work-life balance, motivation, and character traits. • *Orton Gillingham and UFLI have changed my life and I am so grateful to have them in my toolbox. Multisensory teaching has always been my forte. It keeps me fresh and there are always new songs/moves/chants to learn. The Science of Reading principles and learning new evidence based strategies for building knowledge are driving my boat right now and I am on fire with excitement for this new learning!!! If I could say I needed something, I think it would be more passion from others in my field. It feels like Covid sucked the*

Theme	Example Data Points
	wind out of so many sails at my school (the best school in the world). My sails are full but my colleagues' are not. It's kind of lonely. • *Teaching special education is a job that is not respected. It is the hardest job I've ever done. General education teachers earn all kinds of rewards/kudos, and I 100% agree that they should, but never have I seen a classroom ESE teacher in my school earn a reward. I do not want or need an award, but it is disheartening, and I do feel underappreciated. This is an incredibly difficult job, and we need additional planning time to implement all the different accommodations our students require. We do not get that time. Instead, we are forced to go to meetings that pertain to teachers in gen ed classrooms.*
Workload	Responses focused on elements of workload, including administrative tasks, class size or caseload size, personnel, and time. • *The teaching profession is bombarded with several extra busy-work tasks, some of which are just time-takers. Considering the prep time we have, sometimes there still isn't enough time to keep up with all the tasks AND have time to prep/find resources to differentiate and prepare lessons that are inclusive to ALL students.* • *Yes, I think it is important to understand that teaching students with learning disabilities requires a lot of time and effort, both in and out of the classroom. For example, I often need to spend time outside of class planning and preparing for lessons that are accessible and engaging for all students. I may also need to attend meetings and trainings related to special education or specific learning disabilities. Additionally, I may need to collaborate with other professionals, such as speech and language pathologists, occupational therapists, or social workers. All of these factors require time and effort, but they are important for providing the best possible education for students with learning disabilities.*
Supports and Facilitators	Responses under this theme focused on resources or supports, school leadership or culture, funding, collaboration with colleagues, training, and family involvement. • *General Ed teachers need resources, para support, planning and instructional time to help students with LDs in our classroom.* • *Ongoing communication and collaboration with other educators and specialists is crucial for the success of these students.*
Education Policies and Accountability	Responses under this theme focused on accountability; district, state, or federal policies; public education as a whole; and salary. • *More pay is needed to recruit and retain staff*

Theme	Example Data Points
	• *Teachers should be given more autonomy in their teaching and assigned mentors and mentees to collaborate and exchange ideas reduce time creating resources that could be found and shared. Districts should not dictate what teachers should teach unless they can come and deliver themselves first to see how flexible we need to be and education of children cannot be assumed that all learn the same way. In addition, class size is a big issue when providing effective instruction specifically when the majority of the children need special services.* • *Let well trained teachers do what they do best without micro-managing them.*
Excluded from Analysis	Responses under this theme contained nonanswers, incomplete answers, or unsure answers. • *Nothing at this time* • *No thank you* • *N/A*

***Note*. All data points grouped under each theme can be found in Appendix I in the Educator Survey: Thematic Coding Supplement (Wong et al., 2025).**

Table 67. Thematic Coding: Additional Information—Delineated by Role

Theme	General Educator *n* (%) [a]	Special Educator *n* (%) [b]	All *n* (%) [c]
Student Needs, Behavior, Effort, or Impact	101 (8.94)	40 (7.63)	95 (5.74)
Students with Learning Disabilities	37 (3.27)	14 (2.67)	51 (3.08)
Educator Well-being, Motivation, or Character Traits	22 (1.95)	18 (3.44)	40 (2.42)
Workload	173 (15.31)	88 (16.79)	261 (15.78)
Supports and Facilitators	226 (20.00)	131 (25.00)	357 (21.58)
Education Policies and Accountability	43 (3.81)	24 (4.58)	67 (4.05)

Theme	General Educator *n* (%) [a]	Special Educator *n* (%) [b]	All *n* (%) [c]
Excluded from Analysis	654 (57.88)	273 (52.10)	927 (56.05)

[a] ***n*** **refers to the number of responses to Q10.1 that were provided by general educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by general educators by the total number of general educator respondents (n = 1,130). For example, 8.94% of general educator respondents mentioned something related to "Student Needs, Behavior, Effort, or Impact" in response to Q10.1. Percentages may not total to 100% as some data points contained more than one theme.**

[b] ***n*** **refers to the number of responses to Q10.1 that were provided by special educator respondents that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses under each theme that were provided by special educators by the total number of special educator respondents (n = 524). For example, 7.63% of special educator respondents mentioned something related to "Student Needs, Behavior, Effort, or Impact" in response to Q10.1. Percentages may not total to 100% as some data points contained more than one theme.**

[c] ***n*** **refers to the number of responses to Q10.1 that were ultimately grouped under each theme. Unweighted percentages were calculated by dividing the total number of responses to Q10.1 classified under each theme by the total number of Educator Survey respondents (n = 1,654). For example, 5.74% of Educator Survey respondents mentioned something related to "Student Needs, Behavior, Effort, or Impact" in response to Q10.1. Percentages may not total to 100% as some data points contained more than one theme.**

5.2.9 Differences Within the Unweighted Sample

Over 50% of our unweighted sample reported they teach in Florida (*n* = 1,084, 65.54%). Given the large portion of our unweighted sample from one state, we compared selected characteristics between (1) educators who teach in Florida and (2) educators who do not teach in Florida. Each table below presents the unweighted percentages for these two groups (see Tables 68-71).

Table 68. Selected Characteristics: Demographics

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
What is your current age? (Q4.3)		
18 to 24	0.37	2.81
25 to 34	16.70	39.47
35 to 44	28.69	41.40

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
45 to 54	31.73	12.81
55 to 64	20.30	3.51
65+	2.21	0.00[c]
What is your gender identity? (Q4.4)		
Female	83.95	47.37
Male	14.76	51.40
Non-binary	0.18	0.53
Transgender woman or transgender man	0.00[c]	0.00[c]
Other	0.00[c]	0.00[c]
Prefer not to answer	1.11	0.70
What is your race/ethnicity? (Q4.5)		
American Indian or Alaska Native	0.28	2.11
Asian American or Asian	1.57	3.16
Black or African American	8.77	23.86
Hispanic or Latino	11.62	4.56
Native Hawaiian or Pacific Islander	0.09	0.88
White	71.68	63.68

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
Two or More	2.40	0.53
Other	0.83	0.53
Prefer not to answer	2.77	0.70
What is the highest level of education that you have completed? (Q2.7)		
Primary school	0.00[d]	0.00[d]
High school diploma, GED, or equivalent	0.00[d]	0.00[d]
Associate's degree	0.00[c]	2.28
Bachelor's degree	48.80	30.88
Master's degree	43.82	36.84
Education Specialist degree (e.g., Ed.S.)	4.89	24.56
Doctoral degree (e.g., Ph.D.)	2.49	5.44
None of the above.	0.00[d]	0.00[d]
Which best describes your total household income? (Q4.6)		
$0 to $20,999	0.18	2.28
$21,000 to $40,999	0.83	9.47
$41,000 to $85,999	45.76	22.46
$86,000 to $164,999	42.16	41.58

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
$165,000 to $209,999	7.38	17.37
$210,000 to $525,999	3.41	4.21
$525,000+	0.28	2.63

Note. Each variable or survey item may not total to 100% due to rounding.

[a] Percentages represent unweighted estimates based on our survey sample of K-12 educators who teach in Florida (*n* = 1,084).

[b] Percentages represent unweighted estimates based on our survey sample of K-12 educators who do not teach in Florida (*n* = 570).

[c] Weighted percentage is exactly 0 as no individuals selected this response option.

[d] Weighted percentage is exactly 0 as individuals who selected this response option were excluded from the survey.

Table 69. Selected Characteristics: Teaching Demographics and Credentials

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
How many years, in total, have you been a licensed K-12 teacher in the United States? (Q5.2)		
0-3 years	1.20	6.32
4-9 years	19.93	53.51
10 or more years	78.87	40.18
What type of state teaching license, certificate, or other state required document do you hold? Select all that apply to your current role. (Q5.4) [c]		
Full, standard, or professional	98.34	86.49

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
National Board	4.80	16.49
Substitute	0.46	7.54
Emergency	0.37	4.21
Alternative (e.g., Teach for America)	0.83	6.84
Provisional	0.46	7.54
Administrative	1.38	8.07
Other	0.18	0.70
How did you earn your credential(s) or license(s) for your current teaching role? Select all that apply. (Q5.7) [c]		
A teacher preparation program at a community college	10.52	41.75
A teacher preparation program at a college or university	74.45	73.33
Alternative certification program	21.59	14.39
Emergency certification program	0.83	6.84
Other (Q5.7_6_TEXT) [d]	2.68	0.53
Does your current teaching assignment (e.g., grade level, content area) align with your active credential(s) or license(s)? (Q5.6)		
Yes	99.54	99.82
No	0.46	0.18

***Note*. Each variable or survey item may not total to 100% due to rounding.**

[a] Percentages represent unweighted estimates based on our survey sample of K-12 educators who teach in Florida (*n* = 1,084).

[b] Percentages represent unweighted estimates based on our survey sample of K-12 educators who do not teach in Florida (*n* = 570).

[c] Item was select-all-that apply and may not total to 100%.

[d] A text box was provided with the "Other" response option where respondents could type in additional information. See Appendix E for all responses typed in this "Other" box for this item, along with whether the response was recoded into an existing multiple-choice option for this item.

Table 70. Selected Characteristics: Current School

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
Which best describes where your school is? (Q6.3)		
Urban area	28.41	62.11
Suburban area	57.29	29.47
Rural area	11.44	7.89
I'm not sure.	2.86	0.53
Do you currently teach at a Title 1 school? (Q6.4)		
Yes	57.20	83.68
No	40.31	13.33
Unsure	2.49	2.98
What type of school do you currently teach at? (Q6.5)		
Public school	92.99	58.77
Private school	1.38	27.19

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
Charter school (public or private)	3.51	7.02
Montessori school	0.18	1.23
Alternative school or center (e.g., juvenile justice schools, school or center for behavior)	1.20	0.35
School for students with learning disabilities	0.65	5.44
Other	0.09	0.00 [c]

[a] Percentages represent unweighted estimates based on our survey sample of K-12 educators who teach in Florida (*n* = 1,084).

[b] Percentages represent unweighted estimates based on our survey sample of K-12 educators who do not teach in Florida (*n* = 570).

[c] Weighted percentage is exactly 0 as no individuals selected this response option.

Table 71. Selected Characteristics: Current Role

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
Which of the following best describes your current role? (Q2.6)		
General educator	75.92	53.86
Special educator	24.08	46.14
How many years have you been in your current role at your current school? (Q5.3)		
0-3 years	29.71	29.65

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
4-9 years	37.64	55.09
10 or more years	32.66	15.26
What grade level(s) do you currently teach? Select all that apply. (Q6.7) [c]		
Elementary (K, 1st, 2nd, 3rd, 4th, 5th)	54.98	65.96
Middle (6th, 7th, 8th)	24.26	37.72
High (9th, 10th, 11th, 12th)	25.74	34.04
What academic subjects do you currently teach? Select all that apply. (Q2.8) [c]		
Reading or English Language Arts	68.45	70.53
Mathematics	61.07	48.42
Social Studies (e.g., history, civics, economics, government)	45.66	41.93
Science	46.77	40.18
Writing	44.46	43.33
About how many of your students this year are below grade-level standards and expectations? (Q6.8)		
None of my students	1.01	3.51
A few of my students	32.47	36.49
About half of my students	30.90	33.16

Variable	Educators Who Teach in Florida Unweighted % [a]	Educators Who Do Not Teach in Florida Unweighted % [b]
Most of my students	24.82	17.72
All of my students	10.79	9.12
About how many of your students this year have or are suspected to have a learning disability in reading, writing, or math? (Q6.9)		
None of my students	1.29	2.11
A few of my students	59.69	39.30
About half of my students	18.54	28.42
Most of my students	9.87	19.12
All of my students	10.61	11.05

***Note*. Each variable or survey item may not total to 100% due to rounding.**

[a] Percentages represent unweighted estimates based on our survey sample of K-12 educators who teach in Florida (*n* = 1,084).

[b] Percentages represent unweighted estimates based on our survey sample of K-12 educators who do not teach in Florida (*n* = 570).

[b] Item was select-all-that apply and may not total to 100%.

5.3 Research Questions

The following research questions guided our analyses and were based on existing literature as indicated in the *State of Learning Disabilities*. We note here as a limitation we were restricted by the survey items in our efforts to balance depth, breadth, and survey fatigue.

Research Question 1: How are perceptions of one's abilities to support students with LD (teacher willingness to initiate dialogue between general educators and special educators and comfort implementing teaching practices related to data-driven planning and instruction in academics) associated with confidence in one's own ability to adapt instruction to meet the needs of students with LD? (Model 1)

Research Question 2: How are factors related to perceptions of one's abilities to support students with LD (teacher willingness to initiate dialogue between general educators and special educators and comfort implementing teaching practices related to data-driven planning and instruction in academics), perceptions of colleagues' ability to support students with or at risk for LD, perceptions of collaborative culture, perceptions of school leadership support, and perceptions of resources and supports associated with confidence in one's own ability to adapt instruction to meet the needs of students with learning disabilities? (Model 2)

Research Question 3: Do results vary by subgroups of interest (i.e., race/ethnicity, role, number of years teaching, number of students below grade level, certification route)?

Below we describe our process to build models based on available survey items and existing theory, estimate models, and examine differences across subgroups.

5.4 Structural Equation Modeling and Subgroup Analyses

We used SEM to answer our research questions about perceptions and experiences that might impact teachers' level of confidence to adapt instruction to meet the needs of students with LD. (Q7.6_1).

Below we describe our process to estimate latent factors and present results for SEMs and subgroup analyses.

5.4.1 Model Generation

We first examined the survey items to determine how they could be conceptually and theoretically grouped to represent relevant latent factors. To determine which survey items would correspond with constructs of interest, we first grouped survey items based on what is known in existing literature.

In line with best practice, we aimed to have a minimum of three indicators on each latent construct (Kline, 2016). As shown in Table 72, some survey items were provided in parallel to general educators and special educators where general educator respondents were asked about their special educator colleagues and special educator respondents were asked about their general educator colleagues. For example, Q8.10_3 asked *general educator* respondents to indicate their level of agreement with "I know how to discuss topics related to disability and special education with my special education colleagues at my school" and was only given to general educators; while item Q8.13_3 asked *special educator* respondents to indicate their level of agreement with "I know how to discuss topics related to disability and special education with my general education colleagues at my school". These parallel items were collapsed into one item.

Table 72. Latent Factors

Latent Factor	Survey Items
Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators	• Rate your level of agreement: I know how to discuss topics related to disability and special education with my special education colleagues at my school (Q8.10_3) [a] • Rate your level of agreement: I talk with my special education colleagues when a student's IEP is not being implemented correctly (Q8.10_4) [a] • Rate your level of agreement: I talk to the special education teacher if I have concerns about a student's IEP (Q8.10_5) [a] • Rate your level of agreement: I know how to discuss topics related to disability and special education with my general education colleagues at my school (Q8.13_3) [b] • Rate your level of agreement: I talk with my general education colleagues when a student's IEP is not being implemented correctly (Q8.13_4) [b] • Rate your level of agreement: I talk to the general education teacher if I have concerns about a student's IEP (Q8.13_5) [b]
Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics	• Rate your level of comfort: Differentiating instruction (Q7.10_1) • Rate your level of comfort - Implementing academic interventions in the general education classroom (Q7.10_4) • Rate your level of comfort - Using student data (including universal screening and progress-monitoring data) to identify skill gaps (Q7.10_7) • Rate your level of comfort - Choosing academic interventions to address students' skill gaps (Q7.10_8) • Rate your level of comfort - Implementing accommodations or modifications (Q7.10_10)
Perceptions of Colleagues' Ability to Support Students With or At Risk for LD	• Rate your level of agreement: Overall, the special education teachers at my school... - Meet the academic needs of all their students (Q8.9_1) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Meet the behavioral needs of all their students (Q8.9_2) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Are competent working with students with learning disabilities (Q8.9_3) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Make instructional decisions aligned with student IEP goals (Q8.9_5) [a] • Rate your level of agreement: Overall, the general education teachers at my school... - Meet the academic needs of all their students (Q8.12_1) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Meet the behavioral needs of all their students (Q8.12_2) [b]

Latent Factor	Survey Items
	• Rate your level of agreement: Overall, the general education teachers at my school... - Are competent working with students with learning disabilities (Q8.12_3) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Make instructional decisions aligned with student IEP goals (Q8.12_5) [b]
Perceptions of Collaborative Culture	• Rate your level of agreement: Overall, the special education teachers at my school... - Are open to collaboration (Q8.9_4) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Value my input (Q8.9_6) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Act on my input (Q8.9_7) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Understand my specialized role, expertise, and responsibilities (Q8.9_8) [a] • Rate your level of agreement: Overall, the special education teachers at my school... - Help my job feel more manageable (Q8.9_9) [a] • Rate your level of agreement: Overall, the general education teachers at my school... - Are open to collaboration (Q8.12_4) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Value my input (Q8.12_6) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Act on my input (Q8.12_7) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Understand my specialized role, expertise, and responsibilities (Q8.12_8) [b] • Rate your level of agreement: Overall, the general education teachers at my school... - Help my job feel more manageable (Q8.12_9) [b]
Perceptions of Leadership Support	• Rate your level of agreement: My school leadership helps me when I ask for it. (Q6.21_3) • Rate your level of agreement: My school leadership has the necessary training and knowledge to meet the academic needs of students with and at risk for learning disabilities (Q6.21_5) • Rate your level of agreement: My school leadership follows through to meet the needs of students with or at risk for learning disabilities (Q6.21_6)
Perceptions of Resources and Supports	• Rate your level of agreement: I have adequate resources to teach students with and at risk for learning disabilities (Q6.20_2)

Latent Factor	Survey Items
	• Rate your level of agreement: I have adequate support to teach students with and at risk for learning disabilities (Q6.20_3) • Rate your level of agreement: I have the time I need to use my knowledge, resources, and supports to meet the needs of students with and at risk for learning disabilities (Q6.20_4)
Comfort Implementing Teaching Practices Related to Compliance	• Rate your level of comfort - Writing student academic intervention plans (as part of MTSS or RTI) (Q7.10_2) • Rate your level of comfort - Writing or implementing individualized education programs (IEPs) (Q7.10_6) • Rate your level of comfort - Implementing accommodations or modifications (Q7.10_10)
Collective Responsibility for Teaching Students with LD	• Rate your level of agreement: Overall, the special education teachers at my school... - Help me meet the needs of students with learning disabilities in my classroom (Q8.9_10) [a] • Rate your level of agreement: At my school, collaborating with special educators benefits students with learning disabilities (Q8.10_1) [a] • Rate your level of agreement: At my school, we (special and general educators) have common teaching philosophies for teaching students with learning disabilities (Q8.10_2) [a] • Rate your level of agreement: At my school, collaborating with general educators benefits students with learning disabilities (Q8.13_1) [b] • Rate your level of agreement: At my school, we (general and special educators) have common teaching philosophies for teaching students with learning disabilities (Q8.13_2) [b] • Rate your level of agreement: I have a colleague at my school who provides guidance on intensifying instruction for students who struggle academically (Q8.7_1) • Rate your level of agreement: I have a colleague at my school who has expertise in students with or at risk for learning disabilities that I rely on (Q8.7_2) • Rate your level of agreement: I am happy with the level of collaboration I have with my colleagues (Q8.7_3) • Rate your level of comfort implementing each of the following practices. - Supporting colleagues at my school in meeting the needs of students with learning disabilities (Q7.10_12)
Beliefs About Students with LD	• Rate your level of agreement: With appropriate supports, students with LD can progress at the same rate as their peers when in inclusion classrooms. (Q9.5_1)

Latent Factor	Survey Items
	• Rate your level of agreement: Inclusion impedes the learning of students performing at or above grade level. (Q9.5_2) [c] • Rate your level of agreement: Students with learning disabilities learn most effectively when placed in a separate setting with peers requiring similar intensive instruction (Q9.5_3) [c]
Beliefs About the Public School System	• Rate how effective our public education system is in... - Meeting the instructional needs of students WITHOUT disabilities (Q9.12_1) • Rate how effective our public education system is in... - Preparing students WITHOUT disabilities for life after high school (Q9.12_2) • Rate how effective our public education system is in... - Meeting the instructional needs of students WITH disabilities (Q9.13_1) • Rate how effective our public education system is in... - Preparing students WITH disabilities for life after high school (Q9.13_2)

[a] This item was only given to respondents who reported "General Educator" as their current role in Q2.6.

[b] This item was only given to respondents who reported "Special Educator" as their current role in Q2.6.

[c] Item has been reverse coded.

We hypothesized two models based on our initial latent factors, existing literature, and NCLD's organizational mission. Model 1 examined how factors most within teacher control—Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics—were associated with confidence in one's own ability to adapt instruction to meet the needs of students with LD. Model 2 added in additional contextual factors and examined how factors within teacher control (Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics), perceptions of colleagues' ability to support students with or at risk for LD, perceptions of school leadership support, and perceptions of resources and supports were associated with confidence in one's own ability to adapt instruction to meet the needs of students with LD.

We then used the *lavaan* package (version 0.6-18; Rosseel, 2012) in R (version R.4.4.2; R Core Team, 2024) to estimate the initial measurement model and final outcome model. The initial measurement model contained hypothesized latent factors and component indicators. We then examined model fit and factor loadings. Factor loadings or pattern coefficients are used to examine the direct effect of the latent factor on the survey item and to determine whether a particular survey item should belong on a latent construct. Factor loadings or pattern coefficients greater than or equal to 0.7 are considered adequate (Kline, 2016), greater than or equal to 0.5 are considered acceptable (Sharma et al., 2005), and less than 0.4 are considered poor (Matsunaga, 2010). When examining the initial measurement models, items with factor

loadings less than 0.4 were removed, and items with factor loadings between 0.4 and 0.6 were further discussed until consensus was reached. Initial measurement models were respecified and assessed using the following model fit criteria: CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).

We next ran the outcome models by including direct and indirect effects, then ran the subgroup analyses on significant latent factors.

Below, findings are presented by model, where we first present the initial measurement model and estimation of latent factors, then the outcome model and subgroup comparisons.

5.4.2 Model 1

Model 1 hypothesized (1) Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and (2) Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics would directly influence confidence in one's own ability to adapt instruction to meet the needs of students with LD (Q7.6_1). Model 1 addresses RQs 1–3 and RQ 5.

5.4.2.A Model 1: Measurement Model

We first estimated an initial measurement model with two latent factors: (1) Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and (2) Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics.. The model fit for the initial measurement model was adequate (Table 73). Further, the initial measurement model suggested adequate estimation of the latent factors and confirmed the two-factor model.

Table 73. Model 1: Model Fit—Initial Measurement Model

Model	df	χ2	RMSEA [90% CI]	CFI	TLI	SRMR
Initial Measurement Model	19	28.29	0.025 [0.000, 0.043]	0.996	0.995	0.020

***Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).**

Latent Factor: Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

The Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor was composed of three survey items (Table 74) that collectively represent dialoging with colleagues to support students with LD:

- knowing how to discuss topics related to disability and special education (Q8.10_3 for general educators, Q8.13_3 for special educators),
- talking with their general education or special education colleagues when a student's IEP is not being implemented correctly (Q8.10_4 for general educators, Q8.13_4 for special educators), and
- talking to their general education or special education colleagues if they have concerns about a student's IEP (Q8.10_5 for general educators, Q8.13_5 for special educators).

All survey items for this latent factor were answered using a 5-point Likert scale for level of agreement (Strongly disagree, Disagree, Undecided, Agree, Strongly agree). As shown in Table 74, the *lavaan* package fixes the factor loading of the first indicator to 1 which fixes the scale of the latent variable (Kline, 2016). All standardized factor loadings were greater than 0.6.

Table 74. Latent Factor: Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

Item	Est.	SE	z-value	P	Std. Est.
I know how to discuss topics related to disability and special education with my general/special education colleagues at my school (Q8.10_3; Q8.13_3)	1.00				0.68
I talk with my general/special education colleagues when a student's IEP is not being implemented correctly (Q8.10_4; Q8.13_4)	1.31	0.08	17.15	0.000	0.81
I talk to the general/special education teacher if I have concerns	1.12	0.07	15.78	0.000	0.81

Item	Est.	SE	z-value	P	Std. Est.
about a student's IEP (Q8.10_5; Q8.13_5)					

***Note*. Items in this table answered using a 5-point Likert scale for level of agreement.**

Latent Factor: Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

The Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics latent factor was composed of five survey items (Table 75) and addressed teaching practices related to data-based decision making, including differentiating instruction (Q7.10_1), implementing academic interventions (Q7.10_4), using student data to identify skill gaps (Q7.10_7), choosing academic interventions to address students' skill gaps (Q7.10_8), and implementing accommodations or modifications (Q7.10_10). All survey items for this latent factor were answered using a 5-point Likert scale for level of comfort (Very uncomfortable, Somewhat uncomfortable, Undecided, Somewhat comfortable, Very comfortable, This is not part of my job). As shown in Table 75, all standardized factor loadings were greater than 0.6.

Table 75. Latent Factor: Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

Item	Est.	*SE*	z-value	*p*	Std. Est.
Rate your level of comfort: Differentiating instruction (Q7.10_1)	1.00				0.74
Rate your level of comfort - Implementing academic interventions in the general education classroom (Q7.10_4)	1.06	0.06	17.51	0.000	0.80
Rate your level of comfort - Using student data (including universal screening and progress-monitoring data) to identify skill gaps (Q7.10_7)	1.06	0.07	15.24	0.000	0.72

Item	Est.	*SE*	z-value	*p*	Std. Est.
Rate your level of comfort - Choosing academic interventions to address students' skill gaps (Q7.10_8)	1.02	0.07	15.27	0.000	0.67
Rate your level of comfort - Implementing accommodations or modifications (Q7.10_10)	0.97	0.05	18.01	0.000	0.75

***Note*. Items in this table were answered using a 6-point Likert scale for level of comfort.**

5.4.2.B Model 1: Outcome Model

In Model 1, the two latent factors were modeled to each have a direct effect on confidence in one's own ability to adapt instruction to meet the needs of students with LD (Figure 8). Model fit for the outcome model is provided in Table 76 and indicate model fit was adequate. Results for Model 1 are provided in Table 77 and suggest both Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics directly influence a teacher's level of confidence to adapt instruction to meet the needs of students with LD. Additionally, the covariance between both latent factors was statistically significant (*Est*. = 0.15, *SE* = 0.02, *p* = .00).

Table 76. Model 1: Model Fit—Outcome Model

Model	*df*	χ2	RMSEA [90% CI]	CFI	TLI	SRMR
Model 1	25	51.01	0.036 [0.022, 0.050]	0.991	0.987	0.023

***Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).**

Figure 8. Model 1: SEM Figure

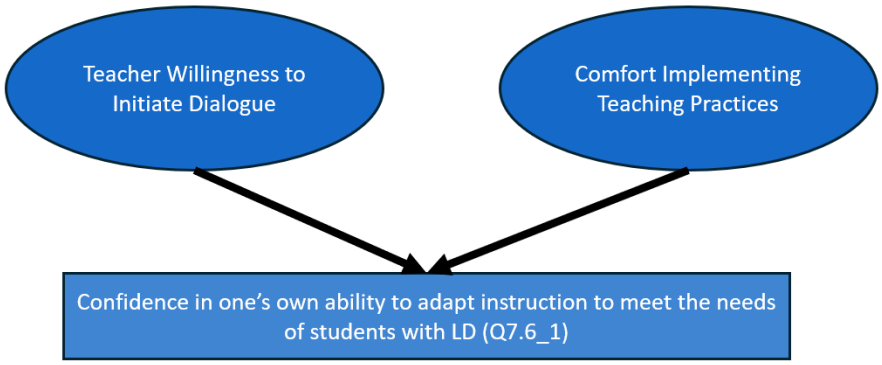


Table 77. Model 1: Model Results

Latent Construct	Est.	*SE*	z-value	*p*	Std. Est.
Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators	0.29	0.07	4.29	0.000	0.19
Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics	0.69	0.09	7.92	0.000	0.47

5.4.2.C Model 1: Subgroup Analyses

Subgroup analyses are only reported for Model 2, as Model 2 contains the latent factors in Model 1 in addition to other latent factors.

5.4.3 Model 2

Model 2 built upon Model 1 by including additional environmental and contextual factors. In addition to Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics, Model 2 included Perceptions of Colleagues' Ability to Support Students With or At Risk for LD, Perceptions of Collaborative Culture, Perceptions of Leadership Support, and Perceptions of Resources and Supports. Model 2 addressed RQs 1–3 and RQ 5.

5.4.3.A Model 2: Measurement Model

The initial measurement model contained six latent factors:

1. Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators
2. Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics
3. Perceptions of Colleagues' Ability to Support Students With or At Risk for LD
4. Perceptions of Collaborative Culture
5. Perceptions of Leadership Support
6. Perceptions of Resources and Supports.

Model fit for the initial measurement model was adequate (Table 78).

Table 78. Model 2: Model Fit—Initial Measurement Model

Model	df	χ2	RMSEA [90% CI]	CFI	TLI	SRMR
Initial Measurement Model	215	731.72	0.051 [0.047, 0.055]	0.959	0.951	0.034

***Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).**

Latent Factor: Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

The Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor was composed of three survey items that collectively represent dialoging with colleagues to support students with LD. As shown in Table 79, all standardized factor loadings were at least 0.7.

Table 79. Latent Factor: Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

Item	Est.	SE	z-value	P	Std. Est.
I know how to discuss topics related to disability and special education with my general/special education colleagues at my school (Q8.10_3; Q8.13_3)	1.00				0.70
I talk with my general/special education colleagues when a student's IEP is not being implemented correctly (Q8.10_4; Q8.13_4)	1.25	0.07	18.32	0.000	0.80
I talk to the general/special education teacher if I have concerns about a student's IEP (Q8.10_5; Q8.13_5)	1.09	0.07	15.83	0.000	0.81

***Note*. Items in this table answered using a 5-point Likert scale for level of agreement.**

Latent Factor: Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

The Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics latent factor was composed of five survey items, where all standardized factor loadings were greater than 0.6 (see Table 80).

Table 80. Latent Factor: Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

Item	Est.	*SE*	z-value	*p*	Std. Est.
Rate your level of comfort: Differentiating instruction (Q7.10_1)	1.00				0.75

Item	Est.	*SE*	z-value	*p*	Std. Est.
Rate your level of comfort - Implementing academic interventions in the general education classroom (Q7.10_4)	1.08	0.06	17.17	0.000	0.81
Rate your level of comfort - Using student data (including universal screening and progress-monitoring data) to identify skill gaps (Q7.10_7)	1.06	0.07	14.94	0.000	0.72
Rate your level of comfort - Choosing academic interventions to address students' skill gaps (Q7.10_8)	1.03	0.07	15.06	0.000	0.68
Rate your level of comfort - Implementing accommodations or modifications (Q7.10_10)	0.97	0.06	17.48	0.000	0.75

***Note*. Items in this table were answered using a 6-point Likert scale for level of comfort.**

Latent Factor: Perceptions of Leadership Support

The Perceptions of Leadership Support latent factor contained three survey items, where all standardized factor loadings were at least 0.7 (see Table 81).

Table 81. Latent Factor: Perceptions of Leadership Support

Item	Est.	*SE*	z-value	*p*	Std. Est.
My school leadership has the necessary training and knowledge to meet the academic needs of students with and at risk for learning disabilities. (Q6.21_5)	1.00				0.78

Item	Est.	*SE*	z-value	*p*	Std. Est.
My school leadership follows through to meet the needs of students with or at risk for learning disabilities. (Q6.21_6)	1.13	0.04	29.72	0.000	0.90
My school leadership helps me when I ask for it. (Q6.21_3)	0.91	0.04	22.51	0.000	0.70

***Note*. Items in this table were answered using a 4-point Likert scale for level of frequency.**

Latent Factor: Perceptions of Resources and Support

The Perceptions of Resources and Support latent factor was composed of three survey items, where all standardized factor loadings were greater than 0.6 (see Table 82).

Table 82. Latent Factor: Perceptions of Resources and Support

Item	Est.	*SE*	z-value	*p*	Std. Est.
I have adequate resources to teach students with and at risk for learning disabilities (Q6.20_2)	1.00				0.80
I have adequate support to teach students with and at risk for learning disabilities (Q6.20_3)	1.22	0.04	28.60	0.000	0.91
I have the time I need to use my knowledge, resources, and supports to meet the needs of students with and at risk for learning disabilities (Q6.20_4)	0.97	0.05	21.02	0.000	0.67

***Note*. Items in this table were answered using a 5-point Likert scale for level of agreement.**

Latent Factor: Perceptions of Colleagues' Ability to Support Students With or At Risk for LD

The Perceptions of Colleagues' Ability to Support Students With or At Risk for LD latent factor contained four survey items, where all standardized factor loadings were greater than 0.6 (see Table 83).

Table 83. Latent Factor: Perceptions of Colleagues' Ability to Support Students With or At Risk for LD

Item	Est.	*SE*	z-value	*p*	Std. Est.
Overall, the general/special education teachers at my school... - Meet the academic needs of all their students (Q8.9_1; Q8.12_1)	1.00				0.85
Overall, the general/special education teachers at my school... - Meet the behavioral needs of all their students (Q8.9_2; Q8.12_2)	0.98	0.02	43.03	0.000	0.81
Overall, the general/special education teachers at my school... - Are competent working with students with learning disabilities (Q8.9_3; Q8.12_3)	0.96	0.03	33.23	0.000	0.82
Overall, the general/special education teachers at my school... - Make instructional decisions aligned with student IEP goals (Q8.9_5; Q8.12_5)	0.87	0.03	25.32	0.000	0.76

***Note*. Items in this table were answered using a 4-point Likert scale for level of consistency.**

Latent Factor: Perceptions of Collaborative Culture

The Perceptions of Collaborative Culture latent factor contained five survey items, where all standardized factor loadings were greater than 0.7 (see Table 84).

Table 84. Latent Factor: Perceptions of Collaborative Culture

Item	Est.	*SE*	z-value	*p*	Std. Est.
Overall, the general/special education teachers at my school... - Are open to collaboration (Q8.9_4; Q8.12_4)	1.00				0.78
Overall, the general/special education teachers at my school... - Value my input (Q8.9_6; Q8.12_6)	1.04	0.04	30.09	0.000	0.83
Overall, the general/special education teachers at my school... - Act on my input (Q8.9_7; Q8.12_7)	1.15	0.04	29.71	0.000	0.86
Overall, the general/special education teachers at my school... - Understand my specialized role, expertise, and responsibilities (Q8.9_8; Q8.12_8)	1.09	0.04	27.72	0.000	0.83
Overall, the general/special education teachers at my school... - Help my job feel more manageable (Q8.9_9; Q8.12_9)	1.20	0.04	31.45	0.000	0.82

***Note*. Items in this table were answered using a 4-point Likert scale for level of consistency.**

5.4.3.B Model 2: Outcome Model

Direct and indirect effects were then added to the measurement model (Figure 9). Model fit for the outcome model is provided in Table 85 and indicate model fit was adequate.

Results for Model 2 are provided in Table 86 and report direct and indirect effects. Model results suggest significant relationships between:

- Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators and a teacher's level of confidence in their ability to adapt instruction to meet the needs of students with LD,
- Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics and a teacher's level of confidence in their ability to adapt instruction to meet the needs of students with LD,
- Perceptions of Collaborative Culture and Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators,
- Perceptions of Resources and Supports and Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics,
- Perceptions of Colleagues' Ability to Support Students With or At Risk for LD and Perceptions of Collaborative Culture and Perceptions of Collaborative Culture
- Perceptions of Leadership Support and Perceptions of Collaborative Culture, and
- Perceptions of Leadership Support and Perceptions of Resources and Supports.

Table 85. Model 2: Model Fit—Outcome Model

Model	*df*	χ2	RMSEA [90% CI]	CFI	TLI	SRMR
Model 2	245	919.68	0.055 [0.051, 0.059]	0.947	0.940	0.078

***Note*. Model fit criteria considered adequate if CFI/TLI ≥ 0.95, RMSEA < 0.06, and SRMR < 0.08 (Hu & Bentler, 1999).**

Figure 9. Model 2: SEM Figure

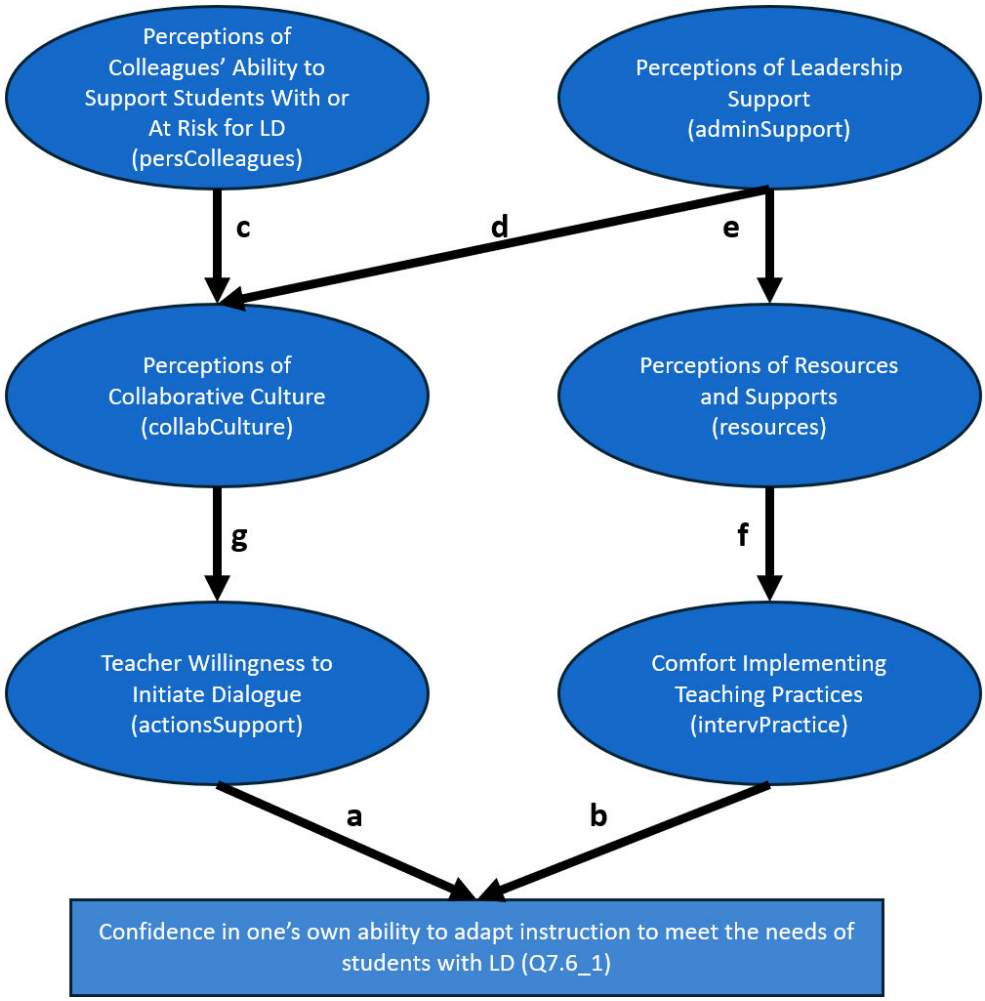


Table 86. Model 2: Model Results

Path	Parameter	Est.	*SE*	z-value	*p*	Std. Est.
actionsSupport → outcome	a	0.31	0.06	5.14	0.000	0.22
intervPractice → outcome	b	0.70	0.09	8.24	0.000	0.49
persColleagues → collabCulture	c	0.72	0.04	18.28	0.000	0.81
adminSupport → collabCulture	d	0.10	0.03	3.16	0.002	0.09

Path	Parameter	Est.	*SE*	z-value	*p*	Std. Est.
adminSupport → resources	e	0.82	0.06	14.92	0.000	0.58
resources → intervPractice	f	0.19	0.03	6.33	0.000	0.28
collabCulture → actionsSupport	g	0.58	0.04	13.34	0.000	0.64
persColleagues → collabCulture → actionsSupport → outcome	agc	0.13	0.03	5.26	0.000	0.11
adminSupport → collabCulture → actionsSupport → outcome	agd	0.02	0.01	2.56	0.011	0.01
adminSupport → resources → intervPractice → outcome	bfe	0.11	0.02	4.57	0.000	0.08

***Note*. Table displays abbreviated names for the latent factors. actionsSupport = Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators. intervPractice = Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics. persColleagues = Perceptions of Colleagues' Ability to Support Students With or At Risk for LD. collabCulture = Perceptions of Collaborative Culture. adminSupport = Perceptions of Leadership Support. resources = Perceptions of Resources and Supports.**

5.4.3.C Model 2: Subgroup Analyses

Based on Model 2 results, we conducted subgroup analyses on the outcome and significant latent factors included in the SEM.

Model 1: Subgroup Analysis—Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD

We first examined whether the outcome—level of confidence in one's ability to adapt instruction to meet the needs of students with LD—approximated a normal distribution.

Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 4.23) for our survey item used as the outcome. Given that transformations (i.e., square root, cube root, log) did not improve the distribution (Table 87), we utilized the original variable as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 87. Model 2: Subgroup Analyses—Variable Transformations for Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD

Transformation	Skewness	Kurtosis
Original	-1.25	4.23
Log of sum	-2.31	10.03
Square root of sum	-1.68	6.21
Cube root of sum	-1.86	7.21

***Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.**

Next, we included the subgroups variables in the GLM: (1) race/ethnicity, (2) number of years teaching, (3) certification route, (4) role (general educator vs. special educator), and (5) number of students below grade level.

Model results are presented in Table 88 and suggest differences on the Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD between (1) race where non-White educators reported lower levels of confidence in their ability to adapt instruction to meet the needs of students with LD compared to White educators, (2) number of years teaching where educators teaching 4-9 years and teaching 10 or more years reported higher levels of confidence compared to educators teaching 0-3 years, and (3) role where special educators reported higher levels of confidence compared to general educators. Means for the Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD latent factor by subgroup are provided in Table 89.

Table 88. Model 2: Subgroup Analysis—Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	-0.57	0.18	-3.19	0.001
Race (Non-White)	-0.16	0.06	-2.62	0.009

Coefficient	Std. Est.	SE	t-value	*p*
Number of Years Teaching				
4-9 years	0.54	0.18	2.98	0.003
10 or more years	0.54	0.18	3.00	0.003
Certification Route (Alternate, Emergency, Other)	-0.01	0.08	-0.07	0.947
Role (Special educator)	0.31	0.06	5.10	0.000
Number of Students Below Grade Level (About half)				
About half	-0.02	0.06	-0.30	0.763
More than half or all	-0.01	0.07	-0.08	0.936

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.

Table 89. Model 2: Subgroup Analyses—Means for Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD by Subgroup

Subgroup	Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD Weighted Mean (SE)
Race	
White	4.28 (0.03)
Non-White	4.11 (0.05)
Number of Years Teaching	

Subgroup	Confidence in Ability to Adapt Instruction to Meet the Needs of Students with LD Weighted Mean (SE)
0-3 years	3.76 (0.17)
4-9 years	4.26 (0.03)
10 or more years	4.26 (0.04)
Certification Route	
Teacher Preparation Program at College or University	4.25 (0.03)
Alternate, Emergency, or Other	4.22 (0.07)
Role	
General Educator	4.18 (0.03)
Special Educator	4.46 (0.04)
Number of Students Below Grade Level	
None or less than half	4.23 (0.04)
About half	4.21 (0.04)
More than half or all	4.31 (0.04)

Model 2: Subgroup Analyses—Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

We then examined the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 5.98) when using the total or the average of the items. Given that transformations (i.e., square root, cube root, log) did not improve the distribution (Table 90), we utilized the

original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 90. Model 2: Subgroup Analyses—Variable Transformations for Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

Transformation	Skewness	Kurtosis
Original (sum of items)	-1.26	5.98
Log of sum	-2.97	16.52
Square root of sum	-1.98	9.64
Cube root of sum	-2.27	11.50
Original (average of items)	-1.26	5.98
Log of average	-2.97	16.52
Square root of average	-1.98	9.64
Cube root of average	-2.27	11.50

***Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.**

Next, we included the subgroups variables in the GLM: (1) race/ethnicity, (2) number of years teaching, (3) certification route, (4) role (general educator vs. special educator), and (5) number of students below grade level.

Model results (Table 91) suggest differences on the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators based on (1) role where special educators exhibited higher levels on the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators compared to general educators and (2) number of students below grade level where educators who reported about half their students below grade level demonstrated lower levels on the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators compared to educators who reported none or less than half of their students below grade level. Means for the Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators latent factor by subgroup are provided in Table 92.

Table 91. Model 2: Subgroup Analysis—Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	-0.05	0.16	-0.29	0.769
Race (Non-White)	-0.03	0.06	-0.39	0.695
Number of Years Teaching				
4-9 years	0.10	0.16	0.63	0.532
10 or more years	0.06	0.16	0.41	0.679
Certification Route (Alternate, Emergency, Other)	-0.08	0.08	-1.09	0.278
Role (Special educator)	0.27	0.07	4.03	0.000
Number of Students Below Grade Level (About half)				
About half	-0.15	0.07	-2.21	0.028
More than half or all	-0.07	0.07	-1.04	0.299

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.

Table 92. Model 2: Subgroup Analyses—Means for Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators by Subgroup

Subgroup	Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators Weighted Mean (SE)
Race	
White	12.19 (0.07)
Non-White	12.06 (0.12)
Number of Years Teaching	
0-3 years	11.98 (0.34)
4-9 years	12.21 (0.10)
10 or more years	12.15 (0.08)
Certification Route	
Teacher Preparation Program at College or University	12.20 (0.07)
Alternate, Emergency, or Other	11.95 (0.16)
Role	
General Educator	12.04 (0.07)
Special Educator	12.63 (0.11)
Number of Students Below Grade Level	
None or less than half	12.27 (0.10)

Subgroup	Teacher Willingness to Initiate Dialogue Between General Educators and Special Educators Weighted Mean (SE)
About half	11.94 (0.11)
More than half or all	12.28 (0.11)

Model 2: Subgroup Analyses—Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

We next examined the Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a kurtotic distribution (kurtosis = 9.01) when using the total or the average of the items. Transformations did not improve skewness or kurtosis estimates (Table 93), so we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 93. Model 2: Subgroup Analyses—Variable Transformations for Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

Transformation	Skewness	Kurtosis
Original (sum of items)	-2.06	9.01
Log of sum	-3.79	23.23
Square root of sum	-2.77	14.15
Cube root of sum	-3.08	16.65
Original (average of items)	-2.06	9.01
Log of average	-3.79	23.23
Square root of average	-2.77	14.15

Transformation	Skewness	Kurtosis
Cube root of average	-3.08	16.65

Note. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Next, we included the subgroups variables in the GLM: (1) race/ethnicity, (2) number of years teaching, (3) certification route, (4) role (general educator vs. special educator), and (5) number of students below grade level.

Model results are presented in Table 94 and suggest differences on the Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics based on (1) race where non-White educators reported lower levels of comfort compared to White educators and (2) role where special educators reported higher levels than general educators. Means for the Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics latent factor by subgroup are provided in Table 95.

Table 94. Model 2: Subgroup Analysis—Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	-0.22	0.14	-1.58	0.115
Race (Non-White)	-0.19	0.07	-2.65	0.008
Number of Years Teaching				
4-9 years	0.21	0.14	1.48	0.139
10 or more years	0.24	0.14	1.70	0.090
Certification Route (Alternate, Emergency, Other)	0.02	0.07	0.28	0.783
Role (Special educator)	0.14	0.07	2.08	0.038

Coefficient	Std. Est.	SE	t-value	*p*
Number of Students Below Grade Level (About half)				
About half	0.06	0.06	0.90	0.367
More than half or all	0.01	0.07	0.08	0.936

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.

Table 95. Model 2: Subgroup Analyses—Means for Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics by Subgroup

Subgroup	Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics Weighted Mean (SE)
Race	
White	22.26 (0.10)
Non-White	21.60 (0.21)
Number of Years Teaching	
0-3 years	21.31 (0.45)
4-9 years	22.06 (0.15)
10 or more years	22.19 (0.11)
Certification Route	
Teacher Preparation Program at College or University	22.13 (0.10)

Subgroup	Comfort Implementing Teaching Practices Related to Data-Driven Planning and Instruction in Academics Weighted Mean (SE)
Alternate, Emergency, or Other	22.14 (0.23)
Role	
General Educator	22.02 (0.11)
Special Educator	22.46 (0.16)
Number of Students Below Grade Level	
None or less than half	22.04 (0.14)
About half	22.19 (0.15)
More than half or all	22.18 (0.19)

Model 2: Subgroup Analyses—Perceptions of Leadership Support

We next examined the Perceptions of Leadership Support latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 2.51) when using the total or the average of the items. Transformations did not improve skewness or kurtosis estimates (Table 96), so we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 96. Model 2: Subgroup Analyses—Variable Transformations for Perceptions of Leadership Support

Transformation	Skewness	Kurtosis
Original (sum of items)	-0.35	2.51
Log of sum	-1.09	4.71

Transformation	Skewness	Kurtosis
Square root of sum	-0.67	3.24
Cube root of sum	-0.80	3.62
Original (average of items)	-0.35	2.51
Log of average	-1.09	4.71
Square root of average	-0.67	3.24
Cube root of average	-0.80	3.62

***Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.**

Next, we ran the GLM with the subgroup variables as categorical predictors. Model results are presented in Table 97 and suggest differences on the Perceptions of Leadership Support based on (1) role where special educators reported higher levels than general educators and (2) number of students below grade level where educators who reported about half their students as below grade level and educators who reported more than half or all of their students below grade level exhibited lower levels compared to educators who reported none or less than half of their class before grade level. Means for the Perceptions of Leadership Support latent factor by subgroup are provided in Table 98.

Table 97. Model 2: Subgroup Analysis—Perceptions of Leadership Support

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	-0.07	0.15	-0.50	0.620
Race (Non-White)	0.03	0.06	0.55	0.585
Number of Years Teaching				
4-9 years	0.20	0.15	1.31	0.190
10 or more years	0.21	0.15	1.39	0.164

Coefficient	Std. Est.	SE	t-value	*p*
Certification Route (Alternate, Emergency, Other)	-0.06	0.08	-0.77	0.444
Role (Special educator)	0.15	0.06	2.43	0.015
Number of Students Below Grade Level (About half)				
About half	-0.20	0.06	-3.19	0.001
More than half or all	-0.36	0.07	-5.20	0.000

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.

Table 98. Model 2: Subgroup Analyses—Means for Perceptions of Leadership Support by Subgroup

Subgroup	Perceptions of Leadership Support Weighted Mean (SE)
Race	
White	9.00 (0.07)
Non-White	9.01 (0.11)
Number of Years Teaching	
0-3 years	8.63 (0.31)
4-9 years	9.03 (0.10)
10 or more years	9.00 (0.07)

Subgroup	Perceptions of Leadership Support Weighted Mean (SE)
Certification Route	
Teacher Preparation Program at College or University	9.02 (0.06)
Alternate, Emergency, or Other	8.86 (0.15)
Role	
General Educator	8.97 (0.07)
Special Educator	9.10 (0.10)
Number of Students Below Grade Level	
None or less than half	9.34 (0.09)
About half	8.90 (0.10)
More than half or all	8.69 (0.11)

Model 2: Subgroup Analyses—Perceptions of Resources and Supports

We next examined the Perceptions of Resources and Supports latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 2.66) when using the total or the average of the items. Transformations did not improve skewness or kurtosis estimates (Table 99), so we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 99. Model 2: Subgroup Analyses—Variable Transformations for Perceptions of Resources and Supports

Transformation	Skewness	Kurtosis
Original (sum of items)	-0.63	2.66
Log of sum	-1.42	4.62
Square root of sum	-1.00	3.37
Cube root of sum	-1.13	3.72
Original (average of items)	-0.63	2.66
Log of average	-1.42	4.62
Square root of average	-1.00	3.37
Cube root of average	-1.13	3.72

***Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.**

Model results for the subgroup analyses are presented in Table 100. Of note, this model did not meet model assumptions so results should be interpreted with caution.

Results may suggest differences on the Perceptions of Resources and Supports based on (1) race where non-White educators exhibited higher levels compared to White educators, (2) certification route where educators took alternative, emergency, or other paths to certification reported lower levels compared to those that attended a teacher preparation program at a college or university, (3) role where special educators reported higher levels compared to general educators, and (4) number of students below grade level where educators who reported about half of their students below grade level and educators who reported more than half or all their students below grade level reported lower levels than educators who reported less than half or none of their students below grade level. Means for the Perceptions of Resources and Supports latent factor by subgroup are provided in Table 101.

Table 100. Model 2: Subgroup Analysis—Perceptions of Resources and Supports

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	-0.05	0.17	-0.29	0.773
Race (Non-White)	0.17	0.06	3.03	0.002
Number of Years Teaching				
4-9 years	0.27	0.17	1.56	0.119
10 or more years	0.03	0.17	0.20	0.840
Certification Route (Alternate, Emergency, Other)	-0.27	0.07	-3.69	0.000
Role (Special educator)	0.47	0.06	7.99	0.000
Number of Students Below Grade Level (About half)				
About half	-0.27	0.06	-4.46	0.000
More than half or all	-0.53	0.07	-7.97	0.000

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level. Model did not meet all assumptions and results should be interpreted with caution.

Table 101. Model 2: Subgroup Analyses—Means for Perceptions of Resources and Supports by Subgroup

Subgroup	Perceptions of Resources and Supports Weighted Mean (SE)
Race	
White	10.08 (0.10)
Non-White	10.54 (0.15)
Number of Years Teaching	
0-3 years	10.03 (0.59)
4-9 years	10.81 (0.15)
10 or more years	9.91 (0.10)
Certification Route	
Teacher Preparation Program at College or University	10.31 (0.09)
Alternate, Emergency, or Other	9.36 (0.21)
Role	
General Educator	9.89 (0.10)
Special Educator	11.00 (0.15)
Number of Students Below Grade Level	
None or less than half	10.81 (0.13)

Subgroup	Perceptions of Resources and Supports Weighted Mean (SE)
About half	9.98 (0.15)
More than half or all	9.59 (0.16)

Model 2: Subgroup Analyses—Perceptions of Colleagues' Ability to Support Students With or At Risk for LD

We next examined the Perceptions of Colleagues' Ability to Support Students With or At Risk for LD latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a minimally kurtotic distribution (kurtosis = 2.46) when using the total or the average of the items. Transformations did not improve skewness or kurtosis estimates (Table 102), so we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 102. Model 2: Subgroup Analyses—Variable Transformations for Perceptions of Colleagues' Ability to Support Students with or At Risk for LD

Transformation	Skewness	Kurtosis
Original (sum of items)	-0.32	2.46
Log of sum	-1.05	4.08
Square root of sum	-0.65	3.02
Cube root of sum	-0.78	3.31
Original (average of items)	-0.32	2.46
Log of average	-1.05	4.08
Square root of average	-0.65	3.02

Transformation	Skewness	Kurtosis
Cube root of average	-0.78	3.31

Note. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.

Model results for the subgroup analyses are presented in Table 103. Subgroup analyses suggest differences on the Perceptions of Colleagues' Ability to Support Students With or At Risk for LD based on (1) race where non-White educators reported higher levels compared to White educators, (2) certification route where educators who took an alternative, emergency, or other route exhibited lower levels compared to educators who attended a teacher preparation program at a college or university, and (3) number of students below grade level where educators who reported about half of their students below grade level and educators who reported more than half or all of their students below grade level exhibited lower levels compared to educators who reported less than half or none of their students below grade level. Means for the Perceptions of Colleagues' Ability to Support Students with or At Risk for LD latent factor by subgroup are provided in Table 104.

Table 103. Model 2: Subgroup Analysis—Perceptions of Colleagues' Ability to Support Students with or At Risk for LD

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	0.28	0.11	2.52	0.012
Race (Non-White)	0.14	0.06	2.23	0.026
Number of Years Teaching				
4-9 years	0.12	0.11	1.04	0.301
10 or more years	-0.15	0.11	-1.40	0.163
Certification Route (Alternate, Emergency, Other)	-0.29	0.07	-3.94	0.000
Role (Special educator)	-0.08	0.07	-1.22	0.223

Coefficient	Std. Est.	SE	t-value	*p*
Number of Students Below Grade Level (About half)				
About half	-0.24	0.07	-3.68	0.000
More than half or all	-0.40	0.07	-5.51	0.000

Note. **The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.**

Table 104. Model 2: Subgroup Analyses—Means for Perceptions of Colleagues' Ability to Support Students with or At Risk for LD by Subgroup

Subgroup	Perceptions of Colleagues' Ability to Support Students With or At Risk for LD Weighted Mean (SE)
Race	
White	11.17 (0.10)
Non-White	11.61 (0.16)
Number of Years Teaching	
0-3 years	11.55 (0.31)
4-9 years	11.86 (0.14)
10 or more years	11.01 (0.10)
Certification Route	
Teacher Preparation Program at College or University	11.38 (0.09)

Subgroup	Perceptions of Colleagues' Ability to Support Students With or At Risk for LD Weighted Mean (SE)
Alternate, Emergency, or Other	10.56 (0.21)
Role	
General Educator	11.37 (0.10)
Special Educator	10.83 (0.17)
Number of Students Below Grade Level	
None or less than half	11.87 (0.13)
About half	11.16 (0.15)
More than half or all	10.59 (0.16)

Model 2: Subgroup Analyses—Perceptions of Collaborative Culture

We next examined the Perceptions of Collaborative Culture latent factor.

Histograms, QQ plots, and skewness and kurtosis suggested a slightly kurtotic distribution (kurtosis = 2.44) when using the total or the average of the items. Transformations did not improve skewness or kurtosis estimates (Table 105), so we utilized the original variable representing the sum of the item values as these skewness and kurtosis estimates were closest to the –2.0 to 2.0 threshold.

Table 105. Model 2: Subgroup Analyses—Variable Transformations for Perceptions of Collaborative Culture

Transformation	Skewness	Kurtosis
Original (sum of items)	-0.30	2.44
Log of sum	-1.04	4.16

Transformation	Skewness	Kurtosis
Square root of sum	-0.63	3.03
Cube root of sum	-0.76	3.33
Original (average of items)	-0.30	2.44
Log of average	-1.04	4.16
Square root of average	-0.63	3.03
Cube root of average	-0.76	3.33

***Note*. Criteria for normality: skewness and kurtosis between –2.0 and 2.0.**

Next, we included the subgroups variables in the GLM: (1) race/ethnicity, (2) number of years teaching, (3) certification route, (4) role (general educator vs. special educator), and (5) number of students below grade level.

Model results are presented in Table 106 and suggest differences on the Perceptions of Collaborative Culture based on (1) certification route where educators who took an alternative, emergency, or other route exhibited lower levels compared to educators who attended a teacher preparation program at a college or university and (2) number of students below grade level where educators who reported about half of their students below grade level and educators who reported more than half or all of their students below grade level reported lower levels compared to educators who reported less than half or none of their students below grade level. Means for the Perceptions of Collaborative Culture latent factor by subgroup are provided in Table 107.

Table 106. Model 2: Subgroup Analysis—Perceptions of Collaborative Culture

Coefficient	Std. Est.	SE	t-value	*p*
Intercept	0.41	0.17	2.44	0.015
Race (Non-White)	0.12	0.07	1.78	0.076

Coefficient	Std. Est.	SE	t-value	*p*
Number of Years Teaching				
4-9 years	-0.06	0.17	-0.34	0.736
10 or more years	-0.30	0.16	-1.86	0.062
Certification Route (Alternate, Emergency, Other)	-0.24	0.08	-3.05	0.002
Role (Special educator)	-0.04	0.08	-0.47	0.642
Number of Students Below Grade Level (About half)				
About half	-0.26	0.07	-3.82	0.000
More than half or all	-0.33	0.08	-4.22	0.000

Note. The following reference groups were used: White for race, Teacher preparation program at a college or university for certification route, General Educator for role, 0-3 years for number of years teaching, and none/less than half for number of students below grade level.

Table 107. Model 2: Subgroup Analyses—Means for Perceptions of Collaborative Culture by Subgroup

Subgroup	Perceptions of Collaborative Culture Weighted Mean (SE)
Race	
White	14.24 (0.12)
Non-White	14.70 (0.21)
Number of Years Teaching	

Subgroup	Perceptions of Collaborative Culture Weighted Mean (SE)
0-3 years	15.17 (0.59)
4-9 years	14.99 (0.18)
10 or more years	14.05 (0.13)
Certification Route	
Teacher Preparation Program at College or University	14.46 (0.12)
Alternate, Emergency, or Other	13.62 (0.27)
Role	
General Educator	14.42 (0.12)
Special Educator	13.86 (0.22)
Number of Students Below Grade Level	
None or less than half	15.02 (0.17)
About half	14.08 (0.19)
More than half or all	13.75 (0.20)

6. Limitations

There are several limitations to these findings. First, all data was self-reported. Without additional information from survey respondents or additional data sources (e.g., teacher license number), we cannot definitively say whether survey respondents within our sample are indeed K-12 educators who teach in the United States. Further, because all data was self-reported, we cannot confirm or cross-check information (e.g., whether the teaching practices teachers say they use are indeed implemented within their classrooms). Additionally, given regional differences in education policy, similar programs, services, or supports may be referred to differently, meaning there is inherent noise in our data.

Second, nonprobability sampling was used, and participants opted to take the survey. While the survey was weighted to be nationally representative in terms of role, race/ethnicity, gender, and highest level of education obtained, it is important to acknowledge that our sample was in essence a convenience sample recruited from potentially biased sources. Because we recruited survey participants from social media—including groups whose focus is implementing evidence-based practices—as well as publicly available teacher emails, our sample is likely biased toward educators who are engaged in professional activities and toward states and districts where educator emails are publicly available.

Third, while our sample size is one of the largest in recent years to capture national experiences, perspectives, and beliefs of general and special educators, the weights applied in the analysis are based on NCES data for K-12 educators and, for role, based on NCLD's organizational mission. Further, the NCES data provide categories only for male and female, while our survey included additional options for sex/gender (e.g., non-binary, transgender woman or transgender man, other, prefer not to answer). Additionally, while we have respondents from each state within the United States, most of our unweighted survey sample came from teachers in Florida.

Fourth, though we established and applied extensive criteria to remove survey responses from human and nonhuman bots, there is a possibility that faulty survey data from participants who do not fit our sample of interest was included in our analyses.

Fifth, there are limitations to the survey data we collected and the subgroup analyses. Though all survey items were required to answer, we had missing data on several items that special educators received, where 25.19-42.75% of the unweighted sample and 22.37-39.42% of the weighted sample had missing data on 14 items meaning that SEM and subgroup results may change when a larger sample is used. Additionally, the subgroup GLM for the Perceptions of Resources and Supports latent factor did not meet model assumptions. Further, all survey items

were asked at the same time, meaning that we are unable to make causal claims as we have not established temporal precedence (Kline, 2016).

Despite these limitations, results from this survey are a critical step in exploring the perspectives of general and special educators and how these relationships and perceptions can influence confidence to meet the instructional needs of students with LD.

7. References

Al-Fannah, N. M. (2017). Making defeating CAPTCHAs harder for bots. 2017 IEEE Computing Conference. https://arxiv.org/pdf/1704.02803

American Association for Public Opinion Research. (2016). *Standard definitions: Final dispositions of case codes and outcome rates for surveys* (9th ed.). http://www.aapor.org/AAPOR Main/media/publications/Standard-Definitions20169theditionfinal.pdf

Arigo, D., Pagoto, S., Carter-Harris, L., Lillie, S. E., & Nebeker, C. (2018). Using social media for health research: Methodological and ethical considerations for recruitment and intervention delivery. *Digital Health, 4*. https://doi.org/10.1177/2055207618771757

Aruguete, M. S., Huynh, H., Browne, B. L., Jurs, B., Flint, E., & McCutcheon, L. E. (2019). How serious is the 'carelessness' problem on Mechanical Turk? *International Journal of Social Research Methodology, 22*(5), 441–449. https://doi.org/10.1080/13645579.2018.1563966

Berinsky, A. J., Powell, E. N., Schickler, E., & Yohai, I. B. (2011). Revisiting public opinion in the 1930s and 1940s. *PS: Political Science & Politics, 44*(3), 515–520. https://www.jstor.org/stable/41319764

Bollier, A. M., Sutherland, G., Krnjacki, L., Kasidis, V., Katsikis, G., Ozge, J., & Kavanagh, A. M. (2021). *Attitudes matter: Findings from a national survey of community attitudes toward people with disability in Australia*. Centre of Research Excellence in Disability and Health, The University of Melbourne. DOI: 10.26188/15176013

Bradburn, N. M. (2004). Understanding the question-answer process. *Survey Methodology, 30*(1), 5–15.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Buchanan, E. M., & Scofield, J. E. (2018). Methods to detect low quality data and its implication for psychological research. *Behavior Research Methods, 50*, 2586–2596. https://doi.org/10.3758/s13428-018-1035-6

Carter-Harris, L. (2016). Facebook targeted advertisement for research recruitment: A primer for nurse researchers. *Applied Nursing Research, 32*, 144–147. http://dx.doi.org/10.1016/j.apnr.2016.07.006

Caughey, D., Berinksy, A. J., Chatfield, S., Hartman, E., Schickler, E., & Sekhon, J. S. (2020). *Target estimation and adjustment weighting for survey nonresponse and sampling bias: Elements in quantitative and computational methods for the social sciences*. Cambridge University Press.

Chandler, J. J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon Mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior Research Methods, 46*(1), 112–130. https://doi.org/10.3758/s13428-013-0365-7

Chandler, J. J., & Paolacci, G. (2017). Lie for a dime: When most prescreening responses are honest but most study participants are impostors. *Social Psychological and Personality Science, 8*(5), 500–508. http://dx.doi.org/10.1177/1948550617698203

Cobern, W. W., & Adams, B. A. J. (2020). Establishing survey validity: A practical guide. *International Journal of Assessment Tools in Education, 7*(3), 404–419. https://doi.org/10.21449/ijate.781366

Deville, J., & Särndal, C. (1992). Calibration estimators in survey sampling. *Journal of the American Statistical Association, 87*(418), 376–382.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.

Dupuis, M., Meier, E., & Cuneo, F. (2019). Detecting computer-generated random responding in questionnaire-based data: A comparison of seven indices. *Behavior Research Methods, 51*, 2228–2237. https://doi.org/10.3758/s13428-018-1103-y

Eckerd, S., DuHadway, S., Bendoly, E., Carter, C. R., & Kaufmann. (2021). On making experimental designs choices: Discussions on the use and challenges of demand effects, incentives, deception samples, and vignettes. *Journal of Operations Management, 67*(2), 261–275. https://doi.org/10.1002/joom.1128

Finch, W. H., Bolin, J. E., & Kelley, K. (2019). *Multilevel modeling using R* (2nd ed.). CRC Press.

Freedman, D. A. (2001). Ecological inference and the ecological fallacy. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopaedia of the social and behavioural sciences* (pp. 4027-4030). Elsevier.

Google for Developers. (n.d.). reCAPTCHA v3. https://developers.google.com/recaptcha/docs/v3

Gravetter, F., & Wallnau, L. (2014). *Essentials of statistics for the behavioral sciences* (8th ed.). Wadsworth.

Griffin, M., Martino, R. J., LoSchiavo, C., Comer-Carruthers, C., Krause, K. D., Stults, C. B., & Halkitis, P. N. (2022). Ensuring survey research data integrity in the era of internet bots. *Quality & Quantity: International Journal of Methodology, 56*(4), 2841–2852. https://doi.org/10.1007/s11135-021-01252-1

Hayduk, L. A., Cummings, G., Boadu, K., Pazderka-Robinson, H., & Boulianne, S. (2007). Testing! Testing! One, two, three—Testing the theory in structural equation models! *Personality and Individual Differences, 42*, 841–850.

Hornik, K., Mair, P., Rauch, J., Geiger, W., Buchta, C., & Feinerer, I. (2013). The textcat package for n-gram based text categorization in R. *Journal of Statistical Software, 52*(6), 1–17. https://www.jstatsoft.org/article/view/v052i06

Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55. https://doi.org/10.1080/10705519909540118

Joreskog, K. G. (1993). Testing structural equation models. In K. A. Bollen & J. S. Lang (Eds.), *Advanced structural equation modeling* (pp. 57–88). Erlbaum.

Kalton, G., & Flores-Cervantes, I. (2003). Weighting methods. *Journal of Official Statistics, 19*(2), 81–97.

King, G., Rosen, O., & Tanner, M. A. (2004). Information in ecological inference: An introduction. In G. King., O. Rosen, & M. A. Tanner (Eds.), *Ecological inference: New methodological strategies* (pp. 1–12). Cambridge University Press.

Kish, L. (1965). *Survey sampling*. John Wiley & Sons.

Kish, L. (1992). Weighting for unequal pi. *Journal of Official Statistics, 8*(2), 183-200.

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (5th ed., pp. 3–427). The Guilford Press.

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (T. D. Little, Ed., 4th ed.). Guilford Press.

Kost, R. G., & de Rosa, J. C. (2018). Impact of survey length and compensation on validity, reliability, and sample characteristics for ultrashort-, short-, and long-research participant perception surveys. *Journal of Clinical and Translational Science, 2*(1), 31–37. https://doi.org/10.1017/cts.2018.18

Krosnick, J. A. (2018). Improving question design to maximize reliability and validity. In D. L. Vannette & J. A. Krosnick (Eds.), *The Palgrave handbook of survey research* (pp. 95–101). Palgrave Macmillan.

Lee, M. T., Bialowolski, P., Weziak-Bialowolska, D., Mooney, K. D., Lerner, P. J., McNeely, E., & VanderWeele, T. J. (2021). Self-assessed importance of domains of flourishing: Demographics and correlations with well-being. *The Journal of Positive Psychology, 16*(1), 137–144. https://doi.org/10.1080/17439760.2020.1716050

Leeman, L., & Wasserfallen, F. (2017). Extending the use and prediction precision of subnational public opinion estimation. *American Journal of Political Science, 61*(4), 1003–1022. https://doi.org/10.1111/ajps.12319

Lehdonvirta, V., Oksanen, A., Rasanen, P., & Blank, G. (2020). Social media, web, and panel surveys: Using non-probability samples in social and policy research. *Policy & Internet, 13*(1), 134–155. https://doi.org/10.1002/poi3.238

Leighton, J. P. (2017). *Using think-aloud interviews and cognitive labs in educational research*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199372904.001.0001

Leighton, K., Kardong-Edgren, Z., Schneidereith, T., & Foisy-Doll, C. (2021). Use social media and snowball sampling as an alternative recruitment strategy for research. *Clinical Simulation in Nursing, 55*, 37–42. https://doi.org/10.1016/j.ecns.2021.03.006

Lumley, T. (2004). Analysis of complex survey samples. *Journal of Statistical Software 9*(1), 1–19. https://doi.org/10.18637/jss.v009.i08

Lumley, T. (2024). *Survey: Analysis of complex survey samples*. R package version 4.4.

Lythreatis, S., Singh, S. K., & El-Kassar, A. (2022). The digital divide: A review and future research agenda. *Technological Forecasting and Social Change*, 175. https://doi.org/10.1016/j.techfore.2021.121359

Matsunaga, M. (2010). How to factor-analyze your data right: Do's, don'ts, and how-to's. *International Journal of Psychological Research, 3*(1), 97-110.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist, 50*, 741–749.

National Center for Education Statistics. (2023). *Characteristics of Public School Teachers*. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved May 8, 2023, from https://nces.ed.gov/programs/coe/indicator/clr

Ooms, J. (2022). *cld2: Google's Compact Language Detector 2*. R package version 1.2.4. https://CRAN.R-project.org/package=cld2

Ooms, J. (2023). *cld3: Google's Compact Language Detector 3*. R package version 1.6.0. https://CRAN.R-project.org/package=cld3

Padilla, J. L., & Leighton, J. P. (2017). Cognitive interviewing and think aloud methods. In B. D. Zumbo & A. M. Hubley (Eds.), *Understanding and investigating response processes in validation research* (pp. 211–228). Springer.

Panorama Education. (n.d.). *User guide: Panorama teacher and staff survey*. Panorama Education. Retrieved August 17, 2023, from https://www.panoramaed.com/products/surveys/teacher-survey

Pew Research Center. (2019). *Social media fact sheet.* https://www.pewresearch.org/internet/fact-sheet/social-media/

Pew Research Center. (2021a, January). *Internet, broadband fact sheet.* https://www.pewresearch.org/internet/fact-sheet/internet-broadband/

Pew Research Center. (2021b, April). *Social media use in 2021*. https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/

Pozzar, R., Hammer, M. J., Underhill-Blazey, M., Wright, A. A., Tulsky, J. A., Hong, F., Gundersen, D. A., & Berry, D. L. (2020). Threats of bots and other bad actors to data quality following research participant recruitment through social media: Cross-sectional questionnaire. *Journal of Medical Internet Research, 22*(10), 1–10. https://www.jmir.org/2020/10/e23021/PDF

Prince, K. R., Litovsky, A. R., & Friedman-Wheeler, D. G. (2012). Internet-mediated research: Beware of bots. *The Behavior Therapist, 35*(5), 85–88. https://psycnet.apa.org/record/2012-32069-001

Qualtrics. (2024a). *Fraud detection.* https://www.qualtrics.com/support/survey-platform/survey-module/survey-checker/fraud-detection/

Qualtrics. (2024b). *Understanding your dataset*. https://www.qualtrics.com/support/survey-platform/data-and-analysis-module/data/download-data/understanding-your-dataset/

Qualtrics. (2025a). *Anonymous link*. https://www.qualtrics.com/support/survey-platform/distributions-module/web-distribution/anonymous-link/

Qualtrics. (2025b). *Email distribution error messages: Distribution statuses.* https://www.qualtrics.com/support/survey-platform/distributions-module/email-distribution/email-distribution-error-messages/?utm_medium=product&utm_source=distributions#DistributionStatuses

Qualtrics Community. (2025). *Same IP address*. https://community.qualtrics.com/survey-platform-54/same-ip-address-21208

Qualtrics Digital Success. (2024). *Setting values from the survey URL*. https://www.qualtrics.com/support/survey-platform/survey-module/survey-flow/standard-elements/embedded-data/#SettingValuesFromTheSurveyURL

R Core Team. (2024). *R: A language and environment for statistical computer*. R Foundation for Statistical Computing. https://www.r-project.org/

Regional Educational Laboratory West (2021). *Creating effective surveys: Best practices in survey design* (ED-IES-17-C-0012). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. https://files.eric.ed.gov/fulltext/ED619797.pdf

Revilla, M., & Ochoa, C. (2017). Ideal and maximum length for a web survey. *International Journal of Market Research, 59*(5), 557–565. https://doi.org/10.2501/IJMR-2017-039

Robbins, M., & Dawson-Hawes, J. (2020). The effect of incentives and mode of contact on the recruitment of teachers into survey panels. *Survey Practice, 13*(1). https://doi.org/10.29115/SP-2020-0013

Rojas, H.A.G. (2020). *samplesize4surveys: Sample size calculations for complex surveys*. R package (version 4.1.1). https://cran.r-project.org/web/packages/samplesize4surveys/samplesize4surveys.pdf

Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36. https://doi.org/10.18637/jss.v048.i02

Ryan, K., Gannon-Slater, N., & Culbertson, M. J. (2012). Improving survey methods with cognitive interviews in small-and medium-scale evaluations. *American Journal of Evaluation, 33*(3), 414–430.

Saldaña, J., & Omasta, M. (2016). *Qualitative research: Analyzing life.* Sage Publications.

Saleh, A., & Bista, K. (2017). Examining factors impacting online survey response rates in educational research: Perceptions of graduate students. *Journal of Multidisciplinary Evaluation, 13*(2), 63–74. https://doi.org/10.56645/jmde.v13i29.487

Schwarz, N. (2007). Cognitive aspects of survey methodology. *Applied Cognitive Psychology, 21*, 277–287.

Sharma, S., Mukherjee, S., Kumar, A., & Dillon, W. R. (2005). A simulation study to investigate the use of cutoff values for assessing model fit in covariance structure models. *Journal of Business Research, 58*(7), 935-943. https://doi.org/10.1016/j.jbusres.2003.10.007

Simone, M., Cascalheira, C. J., & Pierce, B. G., (2023). A quasi-experimental study examining the efficacy of multimodal bot screening tools and recommendations to preserve data integrity in online psychological research. *American Psychologist*. Advance online publication. https://psycnet.apa.org/doi/10.1037/amp0001183

Storozuk, A., Ashley, M., Delage, V., & Maloney, E. A. (2020). Got bots? Practical recommendations to protect online survey from bot attacks. *The Quantitative Methods for Psychology, 16*(5), 472–481. https://dx.doi.org/10.20982/tqmp.16.5.p472

Teitcher, J. E. F., Bockting, W. O., Bauermeister, J. A., Hoefer, C. J. Miner, M. H., & Klitzman, R. L. (2015). Detecting, preventing, and responding to "fraudsters" in internet research: Ethics and tradeoffs. *Journal of Law, Medicine, & Ethics, 43*(1), 116–133. https://doi.org/10.1111/jlme.12200

Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge University Press.

U.S. Census Bureau. (n.d.). *Census regions and divisions of the United States*. https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

U.S. Department of Education. (2011). *Teacher questionnaire, 2011-12 school year*. https://nces.ed.gov/surveys/sass/pdf/1112/SASS4A.pdf

U.S. Department of Education. (2012a). *Teacher follow-up survey: Questionnaire for former teachers, 2012-13 school year*. https://nces.ed.gov/surveys/sass/pdf/1213/tfs-2.pdf

U.S. Department of Education. (2012b). *Teacher follow-up survey: Questionnaire for current teachers, 2012-13 school year*. https://nces.ed.gov/surveys/sass/pdf/1213/tfs-3.pdf

U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). (2023). "State Nonfiscal Survey of Public Elementary/Secondary Education," selected years, 2000-01 through 2021-22. (This table was prepared April 2023.) Retrieved July 1, 2023, from https://nces.ed.gov/programs/digest/d22/tables/dt22_208.30.asp

Valliant, R., & Dever, J. A. (2018). *Survey weights: A step-by-step guide to calculation*. Stata Press.

Valliant, R., Dever, J. A., & Kreuter, F. (2018). *Practical tools for designing and weighting survey samples* (S. E. Fienberg, Ed., 2nd ed.). Springer. https://doi.org/10.1007/978-3-319-93632-1

Valliant, R., & Zipf, G. (2024). *PracTools: Designing and weighting survey samples*. R package version 1.5. https://CRAN.R-project.org/package=PracTools

VanCleef, M. T. (2019). Teacher perceptions of their ability to teach in inclusive classrooms. Education: Student Scholarship & Creative Works, 18. https://jayscholar.etown.edu/edstu/18

Vannette, D. L., & Krosnick, J. A. (2018). *The Palgrave handbook of survey research*. Palgrave Macmillan.

Willis, G. B. (2004). Cognitive interviewing: A tool for improving questionnaire design. Sage Publications.

Willis, G. B., & Artino Jr, A. R. (2013). What do our respondents think we're asking? Using cognitive interviewing to improve medical education surveys. *Journal of Graduate Medical Education, 5*(3), 353–356.

Wong, L. N., Gage, N. A., Blackorby, J., Wilson, S. E., LeBoyd, N., & Ulrich, T. G. (2024a). *Young adult Survey: Technical report*. WestEd. https://www.ncld.org/state-of-ld-report/marcom-09-25-24-young-adult-survey-technical-report_final-for-508/

Wong, L. N., Wilson, S. E., Stelitano, L., Rodrigo, S., Malone, A., & Harris, S. (2024b). National Center for Learning Disabilities – Young Adult State of LD [Project page]. Open Science Framework. DOI 10.17605/OSF.IO/QV6SD

Wong, L. N., Wilson, S. E., Stelitano, L., Rodrigo, S., Malone, A., & Harris, S. (2025). National Center for Learning Disabilities – Educator State of LD [Project page]. Open Science Framework. DOI 10.17605/OSF.IO/YKE7Z

World Health Organization. (1998). WHOQOL: User manual. World Health Organization, Division of Mental Health and Prevention of Substance Abuse. https://www.who.int/tools/whoqol

Wu, M-J., Zhao, K., & Fils-Aime, F. (2022). Response rates of online surveys in published research: A meta-analysis. *Computers in Human Behavior Reports, 7*, 1–11. https://doi.org/10.1016/j.chbr.2022.100206

Xu, Y., Pace, S., Kim, J., Iachini, A., King, L. B., Harrison, T., DeHart, D., Levkoff, S. E., Browne, T. A., Lewis, A. A., Kunz, G. M., Reitmeier, M., Utter, R. K., & Simone, M. (2022). Threats to online surveys: Recognizing, detecting, and preventing survey bots. *Survey Work Research, 46*(4), 343-350. https://doi.org/10.1093/swr/svac023

Yarrish, C. Groshon, L., Mitchell, J. D., Appelbaum, A., Klock, S., Winternitz, T., & Friedman, D. G. (2019). Finding the signal in the noise: Minimizing responses from bots and inattentive humans in online research. *The Behavior Therapist, 42*(7), 235–242. https://psycnet.apa.org/record/2019-63231-004

Yun, G. W., & Trumbo, C. W. (2000). Comparative response to a survey executed by post, e-mail, & web form. *Journal of Computer-Mediated Communication, 6*(1). https://doi.org/10.1111/j.1083-6101.2000.tb00112.x

Appendix A: Cognitive Interview Protocol—Think Aloud

*** This protocol is semi-structured and is participant driven. In other words, the protocol will change and be adapted based on what the participant says and where they lead. It will use a mixture of concurrent probing, proactive verbal probes, reactive verbal probes, and think-aloud interviewing. ***

Introduction

[*Start conversation with rapport building.*]

Thank you so much for agreeing to have a conversation with me about this survey. In this interview, I will be asking you to think out loud while taking the survey. I will explain more about how to do that in a minute. You are free not to answer any question for any reason, and you are welcome to leave the interview at any point. This interview will take between 1 and 2 hours of your time. I will not record your name but instead assign you a participant number. The conversation will be recorded by Zoom and stored on a secure server. The recordings will not be shared with anyone, and all information will be de-identified. Thank you for signing the consent form already. Before we begin, I wanted to make sure you are still okay with participating and having the interview recorded. If so, please say yes. Thank you. Do you have any questions before we begin?

Great! Let's begin. I am going to ask you to share your screen while you take the survey. I am going to record our conversation so that I can go back later and make adjustments to the survey based on your feedback. I am also going to talk to several other individuals like you. I am interested in what is going on in your head while you answer these questions. There is no right or wrong response, nor is there a right or wrong way to think aloud. I am interested in your honest, gut reactions and how you feel about these questions. Specifically, I am looking to understand how you understand each question, how you think about how to answer it, how you decide which answer choice to choose, and how you ultimately respond. Do you have any questions so far?

We are going to be using a think-aloud procedure. This means I am going to ask a few questions but mainly am going to follow your lead. This can feel a little strange at first, and if there is something I can do to help it feel less that way, please let me know. I am going to demonstrate:

[*Demonstrate think-aloud procedure with the following question:*]

How do you feel about mint chocolate chip ice cream?

a. Very positively

b. Positively

c. Neither positively nor negatively

d. Negatively

e. Very negatively

I am going to ask you to do the same for each question in the survey. Do you have any questions or concerns? I may ask additional questions during your think-aloud if I have them or ask you to explain something further. To begin, please read the first question-and-answer set. If you have any questions along the way, please let me know.

Appendix B: Cognitive Interview Protocol—Verbal Probing

*** This protocol is semi-structured and is participant driven. In other words, the protocol will change and be adapted based on what the participant says and where they lead. It will use a mixture of concurrent probing, proactive verbal probes, reactive verbal probes, and think-aloud interviewing. ***

Introduction

[*Start conversation with rapport building.*]

Thank you so much for agreeing to have a conversation with me about this survey. In this interview, I will be asking you to think out loud while taking the survey. I will explain more about how to do that in a minute. You are free not to answer any question for any reason, and you are welcome to leave the interview at any point. This interview will take between 1 and 2 hours of your time. I will not record your name but instead assign you a participant number. The conversation will be recorded by Zoom and stored on a secure server. The recordings will not be shared with anyone, and all information will be de-identified. Thank you for signing the consent form already. Before we begin, I wanted to make sure you are still okay with participating and having the interview recorded. If so, please say yes. Thank you. Do you have any questions before we begin?

Great! Let's begin. I am going to ask you to share your screen while you take the survey. I am going to record our conversation so that I can go back later and make adjustments to the survey based on your feedback. I am also going to talk to several other individuals like you. I am interested in what is going on in your head while you answer these questions. There is no right or wrong response, nor is there a right or wrong way to think aloud. I am interested in your honest, gut reactions and how you feel about these questions. Specifically, I am looking to understand how you understand each question, how you think about how to answer it, how you decide which answer choice to choose, and how you ultimately respond. Do you have any questions so far?

We are going to be using a verbal probe procedure. This means I am going to ask specific questions about your thinking and reactions to the questions presented. I am going to first ask you to read each question and the answer choices aloud. Then, I would like you to explain what you think the question means and why you ultimately choose a particular answer choice. I will also ask additional questions about how you understand the question, why you chose the answer you did, how you feel about the question, and how it could be improved or made

clearer. This can feel a little strange at first, and if there is something I can do to help it feel less that way, please let me know. I am going to demonstrate:

[*Demonstrate think-aloud procedure with the following question:*]

How do you feel about mint chocolate chip ice cream?

a. Very positively
b. Positively
c. Neither positively nor negatively
d. Negatively
e. Very negatively

I am going to ask you to do the same for each question in the survey. Do you have any questions or concerns? I may ask additional questions during your think-aloud if I have them or ask you to explain something further. To begin, please read the first question-and-answer set. If you have any questions along the way, please let me know.

Potential verbal probes to be used:

- What did that question mean to you?
- Why did you choose that response?
- You paused before answering—can you tell me why?
- Why didn't you choose the other response?
- What does _____ mean to you?
- How might you word that differently?
- What led you to pick that answer?
- Was this question easy or hard to answer?
- What do you mean by that?
- Tell me more about that.
- How did you come up with that answer?
- Can you repeat that question in your own words?
- What might make answering this question difficult for someone?

- What feels easy about how the survey is laid out?
- What feels hard about how the survey is laid out?

Appendix C: Social Media Toolkit

Flyer

ABOUT US

NCLD and WestEd

The National Center for Learning Disabilities (NCLD) is one of the nation's leading organizations advancing the lives of individuals with learning disabilities through policy, innovation, practice and outreach.

WestEd is a national nonpartisan, nonprofit organization that works with education and other communities to promote excellence, achieve equity, and improve learning for children, youth, and adults.

OUR EFFORTS

Looking for Participants

NCLD and WestEd would love to hear from **K-12 educators** about their teaching experiences.

Results from this survey will be used to guide outreach, policy, and advocacy efforts at NCLD.

Participants will be asked to take a 15-20 minute online survey and will receive a **$10 electronic Gift Card to Amazon.com.**

Are you eligible?

Questions? Contact us:

Lauren N. Wong, Ph.D.
lwong2@wested.org
Nicholas Gage, Ph.D.
ngage@wested.org

IRB: HE-2023-63 | Date approved: 10/11/2023 | Expiration Date: 10/11/2026

Newsletter or Email Blurb

Subject: WestEd and National Center for Learning Disabilities Survey Study

WestEd and the National Center for Learning Disabilities would love to hear from K-12 educators about their experiences, perspectives, and classroom practices for teaching students with learning disabilities. Results from this survey will be used to guide NCLD's efforts in outreach, policy, and advocacy. Participants will be asked to take a 15–20-minute online survey and will receive a $10 Amazon.com Gift Card. Please click the following link ([*survey link*]) if you are interested in completing the survey!

Social Media Post: Twitter/X

Do you teach students with learning disabilities? WestEd and the National Center for Learning Disabilities would love to hear from you! Click the link if you are interested in participating: [*survey link*].

Social Media Post: Facebook

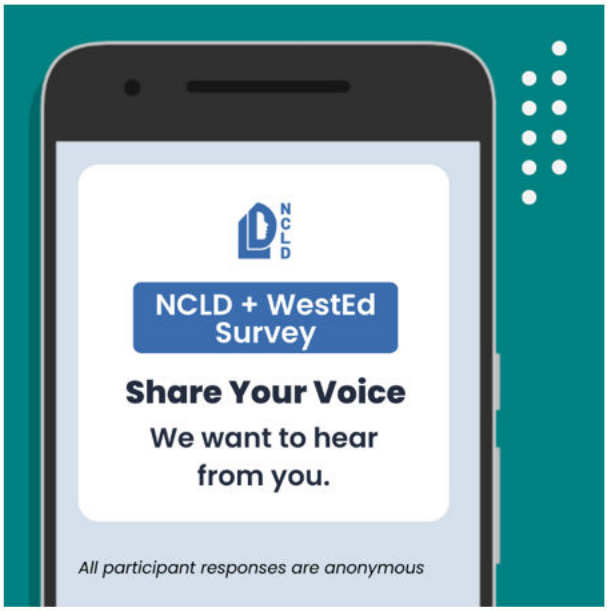
Do you teach students with learning disabilities? WestEd and the National Center for Learning Disabilities would love to hear about your experiences, perspectives, and classroom practices for teaching students with LD. Click the link if you are interested in participating: [*survey link*].

Social Media Post: LinkedIn

Do you teach students with learning disabilities? WestEd and the National Center for Learning Disabilities would love to hear about your experiences, perspectives, and classroom practices for teaching students with LD. Click the link if you are interested in participating: [*survey link*].

Social Media Cards: Twitter/X

Social Media Cards: Facebook and LinkedIn



Email

From: Recruited Site

To: Educators

CC: Lauren Wong

RE: Research study participation regarding experiences teaching students with learning disabilities

Date: XX, XX,2024

Dear <First Name> <Last Name>,

My name is Lauren Wong and I am from WestEd, a nonpartisan, nonprofit organization engaged in educational technical support and research across the country. We are partnered with the National Center for Learning Disabilities, one of the nation's leading organizations advancing the lives of individuals with learning disabilities through policy, innovation, practice, and outreach. We are working together to learn about the experiences, opinions, and perspectives of educators who teach students with learning disabilities.

We are surveying K-12 educators who teach students with learning disabilities. Your participation in this survey will help us understand your experiences teaching students with learning disabilities, the needs you have related to professional development and access to resources, and your school's climate. All information shared will be kept secure and will be de-identified to protect your privacy and confidentiality. Results from this survey will be used to guide NCLD's efforts in outreach, policy, and advocacy.

Participation is completely voluntary and would involve about 20 minutes of your time. Participants who complete the survey will receive a $10 Amazon.com Gift Card.

Please click the following link ([*survey link*]) if you are interested in completing the survey!

Thank you for considering. We appreciate your willingness to share your knowledge and experiences with the research team. If you have any questions, please feel free to contact me.

Sincerely,

Lauren Wong, Ph.D.
Research Associate
WestEd

Appendix D: Survey Weights by Crossed Categories

Role	Gender	Race	Degree	Raked Weight
General educator	Female	Hispanic or Latino	Bachelor	1792.23
Special educator	Female	White	Master	2330.94
Special educator	Female	White	Bachelor	1575.47
Special educator	Female	Asian American or Asian	Master	1795.57
Special educator	Female	Black or African American	Bachelor	588.25
General educator	Female	White	Ed Specialist	2132.55
General educator	Female	White	Master	3224.05
Special educator	Male	White	Bachelor	1390.00
Special educator	Female	Asian American or Asian	Ed Specialist	1187.68
General educator	Female	White	Bachelor	2179.11
General educator	Female	Hispanic or Latino	Master	2651.64
General educator	Male	White	Master	2844.50
General educator	Female	Black or African American	Bachelor	813.64

Role	Gender	Race	Degree	Raked Weight
General educator	Male	White	Doctorate	722.17
General educator	Male	White	Bachelor	1922.58
Special educator	Male	White	Ed Specialist	1360.30
Special educator	Male	Hispanic or Latino	Ed Specialist	1118.79
Special educator	Male	American Indian or Alaska Native	Bachelor	1197.60
Special educator	Male	White	Less than Bachelor	2162.87
Special educator	Female	White	Ed Specialist	1541.81
General educator	Male	American Indian or Alaska Native	Bachelor	1656.46
Special educator	Male	Black or African American	Bachelor	519.00
General educator	Male	Native Hawaiian or Pacific Islander	Bachelor	1409.83
Special educator	Male	Asian American or Asian	Bachelor	1070.74
General educator	Male	White	Ed Specialist	1881.50
Special educator	Female	Hispanic or Latino	Bachelor	1295.76
Special educator	Female	Asian American or Asian	Bachelor	1213.61
Special educator	Female	Black or African American	Ed Specialist	575.68

Role	Gender	Race	Degree	Raked Weight
Special educator	Male	White	Master	2056.54
General educator	Female	Asian American or Asian	Doctorate	630.53
General educator	Male	Asian American or Asian	Master	2191.17
General educator	Male	Hispanic or Latino	Master	2339.48
General educator	Female	Native Hawaiian or Pacific Islander	Bachelor	1597.95
Special educator	Male	American Indian or Alaska Native	Master	1771.87
Special educator	Male	Hispanic or Latino	Bachelor	1143.22
General educator	Female	Black or African American	Master	1203.80
General educator	Female	Hispanic or Latino	Less than Bachelor	2788.75
Special educator	Female	Black or African American	Master	870.33
Special educator	Female	White	Less than Bachelor	2451.47
Special educator	Prefer not to answer	Two or More	Ed Specialist	2.89
General educator	Male	Black or African American	Bachelor	717.85
General educator	Male	Asian American or Asian	Bachelor	1481.00

Role	Gender	Race	Degree	Raked Weight
General educator	Female	Asian American or Asian	Less than Bachelor	2611.96
General educator	Male	Black or African American	Doctorate	269.65
Special educator	Male	White	Doctorate	522.12
Special educator	Female	American Indian or Alaska Native	Bachelor	1357.39
Special educator	Female	Hispanic or Latino	Ed Specialist	1268.07
General educator	Male	American Indian or Alaska Native	Master	2450.76
Special educator	Male	Black or African American	Ed Specialist	507.91
Special educator	Female	White	Doctorate	591.79
Special educator	Male	Prefer not to answer	Doctorate	0.34
General educator	Male	White	Less than Bachelor	2991.58
General educator	Female	Black or African American	Doctorate	305.62
General educator	Female	White	Doctorate	818.53
Special educator	Female	American Indian or Alaska Native	Ed Specialist	1328.39
General educator	Male	Black or African American	Master	1062.08

Role	Gender	Race	Degree	Raked Weight
General educator	Female	Black or African American	Ed Specialist	796.25
General educator	Male	Black or African American	Ed Specialist	702.52
Special educator	Female	Native Hawaiian or Pacific Islander	Master	1709.29
Special educator	Female	Native Hawaiian or Pacific Islander	Ed Specialist	1130.61
Special educator	Female	Black or African American	Doctorate	220.96
Special educator	Male	Black or African American	Less than Bachelor	807.57
General educator	Non-binary	Black or African American	Master	0.71
Special educator	Prefer not to answer	Prefer not to answer	Master	0.00
Special educator	Female	Hispanic or Latino	Master	1917.10
Special educator	Female	Two or More	Master	2298.75
General educator	Female	Two or More	Bachelor	2149.02
General educator	Female	Asian American or Asian	Master	2483.54
General educator	Non-binary	White	Master	1.90
General educator	Female	Other	Master	1.28

Role	Gender	Race	Degree	Raked Weight
Special educator	Male	Black or African American	Master	767.87
General educator	Male	Asian American or Asian	Ed Specialist	1449.36
General educator	Female	Asian American or Asian	Ed Specialist	1642.75
General educator	Female	Hispanic or Latino	Ed Specialist	1753.94
General educator	Male	Hispanic or Latino	Ed Specialist	1547.46
Special educator	Male	Hispanic or Latino	Master	1691.42
General educator	Female	American Indian or Alaska Native	Ed Specialist	1837.36
General educator	Male	Hispanic or Latino	Bachelor	1581.24
General educator	Female	Asian American or Asian	Bachelor	1678.61
Special educator	Female	Other	Master	0.93
General educator	Prefer not to answer	Hispanic or Latino	Master	5.04
General educator	Prefer not to answer	Prefer not to answer	Master	0.00
General educator	Female	Two or More	Master	3179.52
General educator	Female	Prefer not to answer	Master	2.12
General educator	Prefer not to answer	Prefer not to answer	Bachelor	0.00
General educator	Female	Prefer not to answer	Bachelor	1.43

Role	Gender	Race	Degree	Raked Weight
Special educator	Female	Prefer not to answer	Master	1.53
General educator	Male	Prefer not to answer	Master	1.87
General educator	Female	Other	Bachelor	0.87
General educator	Female	Other	Doctorate	0.32
General educator	Male	Prefer not to answer	Bachelor	1.26
General educator	Female	Two or More	Doctorate	807.23
General educator	Male	Two or More	Bachelor	1896.03
Special educator	Female	Hispanic or Latino	Doctorate	486.72
General educator	Female	American Indian or Alaska Native	Bachelor	1877.48
General educator	Non-binary	Black or African American	Bachelor	0.48
General educator	Male	Hispanic or Latino	Doctorate	593.96
Special educator	Female	Two or More	Ed Specialist	1520.52
General educator	Female	Hispanic or Latino	Doctorate	673.21
General educator	Non-binary	Other	Master	0.00
Special educator	Prefer not to answer	White	Bachelor	2.99
General educator	Prefer not to answer	Prefer not to answer	Ed Specialist	0.00
General educator	Male	Native Hawaiian or Pacific Islander	Master	2085.88

Role	Gender	Race	Degree	Raked Weight
Special educator	Female	Prefer not to answer	Doctorate	0.39
Special educator	Male	Two or More	Bachelor	1370.81
Special educator	Prefer not to answer	Prefer not to answer	Bachelor	0.00
General educator	Female	Two or More	Ed Specialist	2103.10

Appendix E: Typed Answers to "Other" Response Option

Item Q5.7 – How did you earn your credential(s) or license(s) for your current teaching role? Select all that apply.

Responses to Other (Q5.7_6_TEXT)	Decision	Recoding
Alternate Route to Licensure	Recoded into existing category for this item and drop from Other count	Alternative certification program
BA in other field and then MS in Education	Recoded into existing category for this item and drop from Other count	A teacher preparation program at a college or university
Bachelor of Arts in Special Education	Recoded into existing category for this item and drop from Other count	A teacher preparation program at a college or university
Certification test	Retained under "Other" category for this item	N/A
College	Retained under "Other" category for this item	N/A
College degree	Retained under "Other" category for this item	N/A
Completed master's degree in special Ed	Recoded into existing category for this item and drop from Other count	A teacher preparation program at a college or university
Content area exam to obtain certification to teach math primarily to middle and high school students.	Retained under "Other" category for this item	N/A

Responses to Other (Q5.7_6_TEXT)	Decision	Recoding
Degree at Ashford University in Social science	Retained under "Other" category for this item	N/A
Degree in critical need area/passed certification exams.	Retained under "Other" category for this item	N/A
ENG BFA and 3 courses during my temporary license	Retained under "Other" category for this item	N/A
English 5-9 Test	Retained under "Other" category for this item	N/A
Exams	Retained under "Other" category for this item	N/A
Have a masters in geophysics. Took educational classes after that and passed 2certifications in science fields and earned my professional certificate	Retained under "Other" category for this item	N/A
Middle school	Retained under "Other" category for this item	N/A
None	Retained under "Other" category for this item	N/A
passed SA certifications	Retained under "Other" category for this item	N/A
State certification requirements	Retained under "Other" category for this item	N/A
Teacher prep program through county I teach in	Retained under "Other" category for this item	N/A
Teaching residency	Retained under "Other" category for this item	N/A

Responses to Other (Q5.7_6_TEXT)	Decision	Recoding
test	Retained under "Other" category for this item	N/A
Through courses and exams	Retained under "Other" category for this item	N/A
Took 3 classes to get certified	Retained under "Other" category for this item	N/A
Took classes at University	Retained under "Other" category for this item	N/A
Took required tests	Retained under "Other" category for this item	N/A
took the test for it	Retained under "Other" category for this item	N/A
went back to school for a master's in education	Recoded into existing category for this item and drop from Other count	A teacher preparation program at a college or university
went to college majored in special ed	Recoded into existing category for this item and drop from Other count	A teacher preparation program at a college or university

Item Q6.10 – Which of the following special education service delivery model(s) are used in your classroom(s)? Select all that apply.

Responses to Other (Q6.10_6_TEXT)	Decision	Recoding
Consult	Retained under "Other" category for this item	N/A
consultation	Retained under "Other" category for this item	N/A
Departmentalized	Retained under "Other" category for this item	N/A
I am dual certified so I serve the ESE minutes for my students with an IEP.	Retained under "Other" category for this item	N/A
Individual help with me	Retained under "Other" category for this item	N/A
Interventions Tier 2 & 3 in classroom	Retained under "Other" category for this item	N/A
MTSS	Retained under "Other" category for this item	N/A
Small Group	Retained under "Other" category for this item	N/A
Students with an IEP are given a class period called "Learning Strategies" where they work with a resource (ESE) teacher to complete classwork for content area classes.	Retained under "Other" category for this item	N/A
Support facilitation	Retained under "Other" category for this item	N/A
This year we are doing a push in and pull-out model	Retained under "Other" category for this item	N/A

Item Q6.11 – Which of the following special education service delivery model(s) do you consistently provide? Select all that apply.

Responses to Other (Q6.11_8_TEXT)	Decision	Recoding
A self-contained classroom that only has special education students	Retained under "Other" category for this item	N/A
Alternative program for BD 9-12 students	Retained under "Other" category for this item	N/A
direct instruction class	Retained under "Other" category for this item	N/A
Direct instruction content equivalent (ESE only)	Retained under "Other" category for this item	N/A
No of the above	Retained under "Other" category for this item	N/A
one on one	Retained under "Other" category for this item	N/A

Item Q6.19 – Which of the following are typically used to determine student transition needs at your school? Select all that apply.

Responses to Other (Q6.19_32_TEXT)	Decision	Recoding
criteria for ESE	Retained under "Other" category for this item	N/A
The school decides	Retained under "Other" category for this item	N/A
The administrators (principal and assistant principals) decide amongst themselves	Retained under "Other" category for this item	N/A
Transition Planning Inventory	Retained under "Other" category for this item	N/A

Item Q8.2 – What does it look like when you collaborate? Select all that apply.

Responses to Other (Q8.2_10_TEXT)	Decision	Recoding
...	Retained under "Other" category for this item	N/A
A collaborative teacher is not available to me as a science teacher	Retained under "Other" category for this item	N/A
An ESE teacher works with a few of my students	Retained under "Other" category for this item	N/A
Have no time to collaborate with teachers	Retained under "Other" category for this item	N/A
I don't collaborate.	Retained under "Other" category for this item	N/A
I plan on my own and observing other teachers is not an option	Retained under "Other" category for this item	N/A
I teach and plan with the exception of ESE support twice a week.	Retained under "Other" category for this item	N/A
I work with my mentor	Retained under "Other" category for this item	N/A
I work with the SLPs for strategies to help my language and speech impaired students	Retained under "Other" category for this item	N/A
Meet at least weekly and review individual student progress and needs with team	Retained under "Other" category for this item	N/A
Mon	Retained under "Other" category for this item	N/A
No of this	Retained under "Other" category for this item	N/A
None	Retained under "Other" category for this item	N/A

Responses to Other (Q8.2_10_TEXT)	Decision	Recoding
Push-In	Retained under "Other" category for this item	N/A
There is no collaboration	Retained under "Other" category for this item	N/A
We are required to examine our data together, set goals, interventions	Retained under "Other" category for this item	N/A
We do not formally collaborate at my school in my department	Retained under "Other" category for this item	N/A
We have a meeting every week that is a “plc” where we copy and paste things from the curriculum map onto a special plc form.	Retained under "Other" category for this item	N/A
Zero collaboration	Retained under "Other" category for this item	N/A

Item Q8.3 – Which activities have you done this year with the following collaborators? Select all that apply.

Responses to Other (Q8.3_9_TEXT)	Decision	Recoding
Ask for assistance from reading teachers because some of my students are functionally illiterate	Retained under "Other" category for this item	N/A
Facilitate Planning by Grade Levels & Lead PLC	Retained under "Other" category for this item	N/A
Informal collaboration	Retained under "Other" category for this item	N/A
Meet weekly for PLCs	Retained under "Other" category for this item	N/A
none	Retained under "Other" category for this item	N/A
None	Retained under "Other" category for this item	N/A
zero collaboration	Retained under "Other" category for this item	N/A

Item Q9.4 – Which three factors most impact your ability to implement your school's inclusion model?

Responses to Other (Q9.4_15_TEXT)	Decision	Recoding
Parent communication	Retained under "Other" category for this item	N/A
attendance	Retained under "Other" category for this item	N/A
Class size	Retained under "Other" category for this item	N/A
cost to hire teachers/paras to fund an appropriate inclusion program	Retained under "Other" category for this item	N/A
ESE Coordinator that do not know how to do there job and students end up in wrong classes and it takes a year to fix issues.	Retained under "Other" category for this item	N/A
financial cliff	Retained under "Other" category for this item	N/A
I don't have a third one, but your survey will not allow me to select only two.	Retained under "Other" category for this item	N/A
In our district for the class period that we are Collabing with another teacher we are not considered to be teaching during that time so we have a higher caseload because we are collabing instead of being the teacher of record.	Retained under "Other" category for this item	N/A
Lack of accountability for support staff	Retained under "Other" category for this item	N/A
lack of ESE teachers	Retained under "Other" category for this item	N/A
LACK OF FUNDING OF THESE SERVICES	Retained under "Other" category for this item	N/A

Responses to Other (Q9.4_15_TEXT)	Decision	Recoding
Lack of student independence, social/emotional issues	Retained under "Other" category for this item	N/A
Lack of time and another support person in room. It isn't so feasible when students with IEPs need 1:1 on many or most skills.	Retained under "Other" category for this item	N/A
lack of transportation	Retained under "Other" category for this item	N/A
Lack of understanding on the part of the District.	Retained under "Other" category for this item	N/A
limited instructional time to complete the requirements per the district's academic plan/curriculum map.	Retained under "Other" category for this item	N/A
Misplacement of "normal" students	Retained under "Other" category for this item	N/A
My program/students typically feel like an "afterthought." Administrators have no clue what is happening and don't even seem to care; like we don't exist.	Retained under "Other" category for this item	N/A
My school doesn’t offer ESE cluster classes to really benefit from inclusion.	Retained under "Other" category for this item	N/A
no other items apply	Retained under "Other" category for this item	N/A
Not enough funds for teachers to have co-teachers	Retained under "Other" category for this item	N/A
Not enough teachers-we are short ESE teachers	Retained under "Other" category for this item	N/A
Parental conflicts	Retained under "Other" category for this item	N/A

Responses to Other (Q9.4_15_TEXT)	Decision	Recoding
Principals do not hold bad behaviors kids accountable because they are scared of upsetting the parents. Kids are walking all over teachers because they know there is no consequence involved. They are not scared, worried about, or respectful of teachers/admin. No fear, they don't care.	Retained under "Other" category for this item	N/A
Students who need to be staffed and need support are refused by the county to be tested and given help.	Retained under "Other" category for this item	N/A
support personnel is often pulled to do other tasks on campus	Retained under "Other" category for this item	N/A
The amount of students with disabilities in the school and only 2 special education teachers, therefore student groups are large and not small enough groups for specialized instruction.	Retained under "Other" category for this item	N/A
there is no plan, they just tell you the student IEP says general ed...	Retained under "Other" category for this item	N/A
Too many students with learning disabilities at my school and not enough ESE support facilitators	Retained under "Other" category for this item	N/A
Too much extraneous paperwork.	Retained under "Other" category for this item	N/A
Too much testing takes away resources	Retained under "Other" category for this item	N/A
Too much time testing district/state. We recognize we need to assess but we lose lots of time to test.	Retained under "Other" category for this item	N/A

Responses to Other (Q9.4_15_TEXT)	Decision	Recoding
Unrealistic expectations of administration and parents.	Retained under "Other" category for this item	N/A
We are a center school- the students come in for 45, 90, or 180 days	Retained under "Other" category for this item	N/A

Item Q9.8 – Which factors most contribute to your job-related stress? Select up to three.

Responses to Other (Q9.8_16_TEXT)	Decision	Recoding
I don't make enough money to make ends meet.	Retained under "Other" category for this item	N/A
Getting through the curriculum before students need to take the End of course exam.	Retained under "Other" category for this item	N/A
Having to teach standards and prepare students for state tests that are developmentally inappropriate	Retained under "Other" category for this item	N/A
High stress, low pay	Retained under "Other" category for this item	N/A
I want to click on all of these. I've taught in the same county for 25 years. 25 years of 3rd grade and I'm now teaching 2nd gr for the first time. It's a total nightmare. Administration is rude and doesn't trust their staff at our school. They harass us about having a door open or locked while we're just trying to survive. The workload is absolutely unattainable. The students are out of control and their parents just don't care. They believe their babies can do no wrong and everything is the teacher's fault. Administration gets onto the teachers more than they do the students. Poor behavior is constantly being overlooked. Having low to high students in a room creates a nightmare of teaching. We are being asked way too much.	Retained under "Other" category for this item	N/A
lack of district support	Retained under "Other" category for this item	N/A

Responses to Other (Q9.8_16_TEXT)	Decision	Recoding
Lack of parent involvement	Retained under "Other" category for this item	N/A
lack of parental/guardian support	Retained under "Other" category for this item	N/A
Lack of pay	Retained under "Other" category for this item	N/A
lack of planning time	Retained under "Other" category for this item	N/A
Lack of planning time	Retained under "Other" category for this item	N/A
Lack of resources	Retained under "Other" category for this item	N/A
Lack of support staff	Retained under "Other" category for this item	N/A
Many things are required of teachers	Retained under "Other" category for this item	N/A
mid-year changes in curriculum	Retained under "Other" category for this item	N/A
No parental involvement	Retained under "Other" category for this item	N/A
Not enough planning time. Working after contract hours.	Retained under "Other" category for this item	N/A
Not enough support staff	Retained under "Other" category for this item	N/A
Not enough time to complete curriculum and too much testing	Retained under "Other" category for this item	N/A
Outside of school issues like student attendance, etc.	Retained under "Other" category for this item	N/A
parents	Retained under "Other" category for this item	N/A
Parents	Retained under "Other" category for this item	N/A

Responses to Other (Q9.8_16_TEXT)	Decision	Recoding
Pay	Retained under "Other" category for this item	N/A
Personal illness	Retained under "Other" category for this item	N/A
Poor pay in general for the amount of work I do	Retained under "Other" category for this item	N/A
Regularly having to evacuate classrooms for displaced students in crisis, sending evacuees who also have autism and other disabilities into crisis. Extremely physically unsafe environment for staff and students.	Retained under "Other" category for this item	N/A
Salary	Retained under "Other" category for this item	N/A
staff not coming to work	Retained under "Other" category for this item	N/A
Staff safety from student assault	Retained under "Other" category for this item	N/A
Student absences	Retained under "Other" category for this item	N/A
Students incorrectly placed in inappropriate level of class (Honors instead of Regular, etc.)	Retained under "Other" category for this item	N/A
students on cell phones	Retained under "Other" category for this item	N/A
Students who need to be staffed but are refused by the county	Retained under "Other" category for this item	N/A
testing pressure	Retained under "Other" category for this item	N/A
the mandate from the Sp Ed department that ALL students should use the SRA Corrective Reading/Reading Mastery program. I strongly disagree with this and am not using it.	Retained under "Other" category for this item	N/A

Responses to Other (Q9.8_16_TEXT)	Decision	Recoding
The periods are too long.	Retained under "Other" category for this item	N/A
too many curriculum parameters	Retained under "Other" category for this item	N/A
Too many dumb kids should not be in school	Retained under "Other" category for this item	N/A
Too much paperwork to complete	Retained under "Other" category for this item	N/A

Item Q9.11 – What three factors do you find most helpful in meeting the academic needs of students with and at risk for learning disabilities?

Responses to Other (Q9.11_30_TEXT)	Decision	Recoding
accountability for student's behavior	Retained under "Other" category for this item	N/A
Allowing teachers to teach what THEY know works for their students. Not the scripted lessons they require us to teach.	Retained under "Other" category for this item	N/A
Collaborative teachers in all academic classes where needed	Retained under "Other" category for this item	N/A
Differentiation	Retained under "Other" category for this item	N/A
Ensuring that teachers are knowledgeable of and have the best resources possible aligned to the state standards and are teaching them accurately and with fidelity.	Retained under "Other" category for this item	N/A
Fair compensation for the work teachers do. Too many of us have second and third jobs- we love what we do and if we didn't have to work so many other jobs we can focus on our health and supporting our students	Retained under "Other" category for this item	N/A
Having a plan to address behaviors from learning disabled children.	Retained under "Other" category for this item	N/A
Hiring and maintaining quality staff	Retained under "Other" category for this item	N/A
Money	Retained under "Other" category for this item	N/A
Paying teachers what they are worth. Society doesn't respect	Retained under "Other" category for this item	N/A

Responses to Other (Q9.11_30_TEXT)	Decision	Recoding
education because of what teachers and educators all make monetarily.		
Reduced Class sizes	Retained under "Other" category for this item	N/A
smaller class sizes	Retained under "Other" category for this item	N/A
state research practices that are effective	Retained under "Other" category for this item	N/A
Time for interventions	Retained under "Other" category for this item	N/A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