RESEARCH

Special Education Teachers Serving Students with Extensive Support Needs: An Exploratory Job Analysis

Journal of the American Academy of Special Education Professionals
2026, Vol. 21(2) 1 - 14

DOI: 10.64546/jaasep.614

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Abstract
Job demands and poor working conditions of special education teachers are one of the main reasons for teacher attrition, one of the most pressing issues in special education today. This study explored the job characteristics and working conditions specific to special education teachers of students with extensive support needs. Sixty-six special education teachers completed a survey of 74 job tasks, indicating the importance of each task, their confidence level, and available time and materials. The results confirmed the importance of 73 out of the 74 tasks. The analysis of the working conditions yielded six patterns, the largest pattern consisting of 35 tasks that were perceived as important but for which the teachers lacked the confidence, time, and materials for implementation. The findings are discussed in the context of demoralization of special education teachers, as well as in terms of school district policies and training of teachers in special education.
Keywords: special educators, working conditions, students with extensive support needs

Since the Education of All Handicapped Children Act, 1975 (PL 94-142), curricular frameworks for students with extensive support needs (ESN) have evolved considerably. Students with ESN may be classified with disabilities including autism, intellectual disability, or multiple disabilities, and are often eligible for a state's alternate assessment. Conceptions of what constitutes good and meaningful education for students with ESN have been shaped by legal mandates, person-centered approaches to curriculum planning, and evidenced-based practices, including a shift from developmental approaches to an ecological and standards-based model that have implications for students' quality of life and emancipation (Hunt et al., 2012). The 2004 amendment to the Individuals with Disabilities in Education Act further requires students with disabilities be educated in the Least Restrictive Environment and participate in the general education curriculum and standards-based assessment. As a result, ESN teachers serving students with ESN are expected to deliver evidence-based, standards-aligned instruction for literacy, math, and science (e.g., Browder & Spooner, 2014) alongside intensive social and

behavior supports (McDonnell et al., 2015).

As expectations expand, ESN teachers' responsibilities have grown accordingly—yet the supports necessary to enact such reforms have not kept pace. This misalignment creates a practical problem that—despite substantial scholarship on special education working conditions and burnout (e.g., Billingsley & Bettini, 2019; 2020)—there is a lack of evidence that specifies essential task-level components of ESN teaching that indicates support gaps that are most acute. To address this gap, the present study uses an exploratory job analysis to identify core ESN teaching tasks and examine whether perceived task importance outpaces ESN teachers' reported confidence and access to key supports—particularly time and materials. Specifically, this research addresses the following questions:

1. How do ESN teachers rate job tasks in terms of importance to their work?
2. How do ESN teachers experience these tasks in terms of confidence and supportive conditions (i.e., adequate time and materials)?

Working Conditions & Attrition of Special Education Broadly

Billingsley and Bettini (2020) conceptualized working conditions as the interaction between (a) special educators' role-based demands and responsibilities, (b) supports—including school culture and leadership, collegial interactions, professional development, and logistical resources—that help teachers meet such demands and provide effective instruction. Extant literature links such complex and challenging working conditions to special educator attrition and persistent teacher shortages (e.g., Billingsley & Bettini, 2019; Brunsting et al., 2014; Gilmour & Wehby, 2020; Hagaman & Casey, 2018; O'Brien et al., 2019; Nguyen et al., 2020). Key job demands associated with attrition include: (a) complexity and size of caseloads, (b) student's disability and behavior-related needs, (c) the service delivery model, (d) paperwork and non-teaching responsibilities, and (e) accountability and assessment pressures (Billingsley & Bettini, 2019). Consistent with these findings, qualitative studies have documented the emotional toll of such conditions with special educators expressing feeling "emotionally drained, ineffective, worthless, helpless, and defeated" (Hester et al., 2020, p. 357).

Additionally, this literature emphasizes that such high job demands are most consequential (e.g., leading to burnout and attrition) when supports for special educators are insufficient. Special education research shows a persistent misalignment between job demands and social resources (e.g., administrative support, colleague support, paraprofessional support, school climate culture), informational resources (e.g., professional development, mentors), and logistical resources (e.g., time, materials; Stark et al., 2022). Consequently, special educator burnout is positively correlated with poor administrator support (e.g., principals), isolation, lack of collegial relationships, limited resources such as classroom materials, curricula, assistive technology, planning time and professional development opportunities (Robinson et al., 2019).

Although this literature clarifies *why* demand-support alignments matter when it comes to special educator retention and well-being, it offers limited task-level detail about *what* special educators' roles entail. Though this is true of special educators broadly, the present study narrows its focus to the ESN context in order to specify the scope of ESN teaching and identify the types of tasks that generate such demands.

Characteristics of the Job of ESN Teachers

The job characteristics of ESN teachers are particularly complex due to the wide variety of instructional, behavioral, and managerial responsibilities required to meet their diverse students' needs. Implementing effective practices for students with ESN also depends on the shared instructional vision and quality of collaboration with families and with multiple professionals (e.g., para-educators, service providers, general education teachers, and administrators), alongside access to evidence-based instructional materials. Such coordination demands intensify the scope of their work and increases the number of essential tasks ESN teachers must carry out to support student learning and participation.

Additionally, most students with ESN continue to be educated in segregated settings (US Department of Education, 2022). The concentration of students with similar and extensive needs in segregated environments places ESN teachers in the position of advocating for inclusive opportunities for their students. Serving as the sole expert and an advocate could be isolating and may limited access to critical social supports for trenchers, including collegial and administrative support (Youngs et al., 2011). Furthermore, ESN teachers often prioritize certain job tasks over others in response to staff absences, scheduling conflicts, and other disruptions. Such conditions can compromise academic instruction and may contribute to feelings of burnout (Billingsley & Bettini, 2019; 2020) as ESN teachers lack the time, materials, or capacity to complete essential tasks.

Although teaching students with ESN involves a wide and interdependent set of tasks that require instructional expertise, coordination, and adequate resources, existing research provides limited task-level specificity about which tasks are most essential and where gaps in confidence, know-how, and logistical supports are most acute.

Methods

Survey Design

The design of this study is based on the O*NET (Occupational Information Network, 2023) content model, which integrates worker-oriented and job-oriented information about nearly 1,000 occupations in the United States. It provides detailed descriptions of work that can be used by people looking for jobs, by human resource professionals, and for workforce development. It assists students, researchers, and job developers in understanding the characteristics and intricacies of different occupations. O*NET's task rating questionnaires consist of a list of job tasks that can be rated for relevance, frequency, and importance. These questionnaires served as a model for this study's survey structure.

In addition, we used the California's Commission on Teaching Preliminary Education Specialist Teacher Credential Program Standards and Teaching Performance Expectations ([TPEs]; 2018) as a basis for developing the survey items. The TPEs describe the professional knowledge and skills that ESN teachers should have to support students' growth and learning and to work with families to meet state-adopted academic content standards. We used the TPEs because they are comprehensive and specific to the education of students with ESN, based on evidence-based practices, and were developed with input from professionals and academics in the field. For ESN teachers, there are 52 TPEs across six domains: (a) engaging and supporting all students in learning; (b) creating and maintaining effective environments for student learning; (c) understanding and organizing subject matter for student learning; (d) planning instruction and designing learning experiences for all students; (e) assessing student learning; and (f) developing as a professional educator.

Survey Design Process

This study used an online survey design (Groves, et al., 2009) to collect data on 74 job tasks for ESN teachers. To increase replicability, we developed survey items using an iterative reduction process designed to (a) maintain alignment with the TPEs, (b) translate competencies into discrete, observable teacher tasks, and (c) produce a survey of manageable length for respondents. At each stage, reduction decisions were guided by explicit criteria—criteria included redundancy/overlap, task observability, ESN specificity, and feasibility for consistent rating across respondent—documented through researcher discussion with all discrepancy resolved via consensus.

TPEs to Survey Items. The construction of the survey began with a review of the 52 TPEs of which 11 were removed as they (a) were not readily operationalizable as discrete teacher tasks (e.g., program-level expectations that span multiple domains) or (b) duplicated competencies represented elsewhere in the TPE set (e.g., TPE 11 broadly addresses implementing collaborative supports in the least restrictive environment, which overlaps with other collaboration/support expectations). This step was intended to preserve task-level specificity and avoid increasing the item pool with questions that could not be rated consistently across

respondents.

Second, for the remaining 41 TPEs, we broke down each one into discrete tasks required to implement that competency in practice. We developed task lists for all TPEs and compared and refined through discussion until consensus was reached. Third, we reviewed the resulting task list across the 41 TPEs and organized them into 10 broad categories: (a) collaborate with other professionals; (b) collaborate with families; (c) assessment; (d) develop IEP goals; (e) develop and adapt instructional strategies and materials based on individualized student needs; (f) train staff; (g) continuing education and professional development; (h) advocate for family and student needs within a broader community context; (i) prepare for a new student; (j) obtain curriculum.

Fourth, each task was assigned to one of the 10 categories and overlapping tasks within each category were collapsed. The categories with few tasks—prepare for a new student, obtain curriculum, advocate for family needs in the broader community, develop IEP goals—were merged into conceptually similar categories to support analytic interpretability. For example, the task related to IEP goal development was collapsed into assessment given that goals are developed based on assessment and data. All mergers were done after in-depth discussion between the researchers.

Fifth, we reviewed the tasks in each category to identify clusters of related work. For example, the category "develop and adapt instructional strategies & materials based on individualized student needs" included 14 tasks that were divided into four clusters of tasks (e.g., academic instruction, behavior management, communication, self-determination). Sixth, to produce a manageable number of survey items, we further reduced redundant tasks by removing tasks that were duplicated within or across clusters and categories and collapsing tasks that overlapped. For example, a specific task like "analyze assessment data together with DHH specialist" was collapsed with "analyze assessment data in collaboration with VI, DHH, Deafblind Specialists, O&M specialists, OT and PT and implement recommendations." This iterative process reduced the task pool from 114 to 76.

Rating Variables. The rating variables were selected based on the research questions, the O*NET content model, and literature on working conditions for special educators. To assess relevance, we piloted an initial set of rating variables on 10 tasks across four categories—frequency, importance, know-how, time, staffing, training, administrative support, community relationships, school culture, supplies & materials. The pilot showed that the tasks in the survey were so specific that it was difficult to score them directly against the variables training, administrative support, community relations and school culture and, as such, were removed. The following rating variables were retained: frequency, importance, know-how/confidence, time, staffing, supplies & materials.

Field Tests. Four ESN teachers who teach different grade levels (K-5, 5-12, high school, transition) who were graduates from the credentialing program of the first and second author reviewed the 76 tasks on the six rating variables. The guiding questions were: (a) Are there task descriptors that are unclear?; (b) Are there tasks that you perform regularly that are not on the list?; (c) Do you think you would be able to rate these tasks on the suggested variables? The feedback from the teachers resulted in small edits of tasks that were unclear, four tasks were collapsed, and task four (learn new curriculum) and task six (clean up) were added. To reduce the amount of time it would take respondents to complete the survey, the question about instructional support staff was moved to the demographic questions section.

After the changes were made and demographic questions were added, another ESN teacher completed the survey and provided feedback on mistakes, items that were unclear or difficult to answer, and any suggestions. Based on their suggestions, further small edits were made including adjusted language in the recruitment email about the psychological effects of taking the survey. The final version of the survey consisted of 12 demographic questions and 74 job tasks rated on relevance, importance, frequency, time, supplies & materials (see appendix A).

Recruitment & Data Collection

After receiving Institutional Review Board approval, participants were recruited in the following ways: (a)

through an email invitation to 71 graduates and 25 intern teachers of the authors' credential program, (b) through five university colleagues who teach ESN programs and who distributed it to their graduates, (c) through an existing data base of 2,365 special educators in different program areas across 27 randomly selected states in the United States. This database, containing publicly available email addresses, was developed for a previous study focused on special educators and their pedagogical practices, a project that involved the first author of this paper (see Firestone et al., 2021). To increase the potential number of respondents, we included intern teachers because, in California, interns serve as the teacher of record and have the same responsibilities and workloads as credentialed teachers. The primary difference is that interns are completing a credential program and receive mentorship via an assigned school district mentor.

Due to the length of the survey, a $50 Amazon gift card was offered to those who completed the survey. To protect anonymity, this was done through a decoupled second survey managed by a university administrator. The researchers had no access to the second survey. The survey yielded a total of 96 responses; however, 30 of those responses were incomplete and were removed from the data set.

Respondents. Most respondents were from California (n = 54), the remaining were Alaska (n = 2), Colorado (n = 1), Massachusetts (n = 3), New Hampshire (n = 1), Vermont (n = 3), and Wyoming (n = 2). All, but one respondent, were teaching in public schools. The majority (76%) were currently teaching students with ESN, six percent were intern teachers (n = 4), and 18% worked as an ESN teacher in the past five years. Respondents who indicated that they didn't work with students with ESN, could not complete the survey.

Most respondents have 1-10 years of teaching experience (64%), 15% reported 11-20 years, 12% reported over 20 years, and 9% reported less than one year of experience. Respondents taught across grade bands (52% taught K-5, 16% taught 6-8, 25% taught grades 9-12, and 6% transition programs teachers). The average caseload was 9.8 students with 67% serving a caseload of only students with ESN, 22% served caseloads with more than half ESN students, and 10% reported caseloads with only half being ESN students. Programs included full inclusion model (13%), mainstreaming for all or some students (58%), special day classes (21%), and other models (7%).

Data Analysis

The data analysis consisted of identifying patterns across tasks using descriptive statistics. First, we defined importance, confidence, time, and materials as dichotomous variables (Table 1).

Second, for each of the 74 tasks we calculated (based on the N for each survey item) the percentage of respondents who rated the task important to their work, who felt confident they had the know-how and the skill to perform that task, who had enough time during the work day to complete this task, and who had enough supplies and materials to perform the task.

Third, following the O*NET model, we initially used a 75/25% threshold to classify tasks as high versus low for each dimension. Based on the preliminary analysis, the 75/25% threshold produced few useful patterns, as responses clustered strongly with the majority of respondents (85%) rating most tasks as highly important while confidence, time, and materials were rated low. To increase analytic sensitivity and make helpful comparisons across tasks, we retained the 75/25% threshold for importance (research question 1) but applied a 65/35% threshold for confidence, time, and materials (research question 2; see Table 1).

Fourth, based on the above thresholds, we indicated per variable and per task whether it was considered high or low. Fifth, we looked for the patterns that appeared from the most desirable pattern (high perceived importance and confidence and high supportive conditions (time and materials) to the most undesirable patterns (high perceived importance, low confidence and low supportive conditions) and other combinations. We sorted the tasks according to confluence of variables in these different patterns.

It is important to note that though the threshold adjustments described above provided useful patterns,

making such adjustments can affect interpretation. Namely, the 65/35 cut points are intended to identify relative task-level strengths and constraints within this sample of ESN teachers (i.e., tasks with comparatively stronger versus weaker perceived capacity/support) rather than to imply an absolute for all ESN teachers. This helped us to identify which tasks ESN teachers generally felt more confident or supported versus those tasks they felt less confident or supported.

Table 1

Operational Definitions and Classification Thresholds

Variable	Definition	%Threshold
Importance	High importance: Viewed the task as essential to their core work. Low Importance: Viewed the task as not essential or peripheral to their core work.	High importance threshold: 75% or more of respondents who answered "important", "very important", and "extremely important" Low importance threshold: 25% or more who answered "not important" & "somewhat important."
Confidence	High confidence: Have a strong know-how to perform the task. Feel prepared, skilled and have the expertise to perform the task with minimal additional training or support. Low confidence: Have limited or no know-how. May need additional support and training or may feel they like the expertise to carry out the task.	High confidence: 65% or more respondents who answered "very confident" as confident. Low confidence: 35% or more respondents who answered "somewhat confident" or "not confident."
Time	Enough time: Can complete essential tasks within their workday often. Perceived time demands for the task are generally manageable within a typical workday. Not enough time: Rarely or never have enough time during their workday to complete essential tasks. May complete tasks outside contracted time or prioritize certain tasks over others.	Enough time (high supportive condition): 65% or more respondents who answered "sometimes," "most," "always" Not enough time (low supportive condition): 35% or more respondents who answered "never" and "rarely" have enough time.
Materials	Enough materials: Have the necessary materials mostly or fully provided for them. Have access to the curricular/tools/resources required to implement essential tasks. Not enough materials: Do not or rarely have the needed materials to carry out essential tasks. Lack of resources may limit implementation of core tasks.	Enough materials (high supportive condition): 65% or more respondents who answered "all materials provided" or "most materials provided" Not enough materials (low supportive condition): 35% or more respondents who answered, "no supplies," "very little supplies," & "some supplies."

Results

Research Question 1: Task Importance

To address research question 1, we examined the percentage of respondents rating each of the 74 tasks as important (Table 1). The tasks spanned six categories: development/adaptation of instructional strategies & materials (13 tasks); assessment & development of IEP goals (14 tasks); training and management (10 tasks); collaboration with professionals (25 tasks); collaboration with families (10 tasks); continuing education & professional development (2 tasks; Table 2). All, but one task, were identified as important by 75% of the

respondents. The only task that did not meet this threshold was related to assessment (receive training and implement alternate statewide assessments for English Language Arts, Math, and English Language Learners).

Research Question 2: Confidence & Supportive Conditions

For research question 2, we explored ESN teachers reported confidence/know-how for each task and whether they had enough time and materials to carry out the task (Table 1). Using the 65/35% threshold (see Method section), we then classified tasks into six patterns based on the combined ratings of importance, confidence, time, and materials (Table 2).

Only one task reflected the most desirable pattern—high importance, high confidence, high supportive conditions—and it was a compliance task (provide copies of all reports and IEP documents to families). A central finding of this study is the high number of tasks in pattern four (47.29%; 35 tasks): those job tasks ESN teachers rated as important, but reported low confidence, and low supportive conditions (i.e., insufficient time and materials). Tasks in this pattern were found across the six categories of tasks (Table 2).

Tasks in pattern five (18.91%; 14 tasks)—high importance, low confidence, and low supportive conditions—primarily related to specialist areas (e.g., behavior, Augmentative Alternative Communication, health). Pattern six (20.27%; 15 tasks)—high importance & confidence, enough time, but insufficient materials—mainly related to the IEP process plus family communication, collaboration with paraprofessionals, communication with specialists on health and behavior, and scheduling. Tasks in pattern one (9.45%; 7 task)—high importance, high confidence, but low supportive conditions—primarily involved curriculum adaptation, collaboration with general educators, paraprofessional, or substitutes. Finally, the one task in pattern three (1.35%)—high importance and supportive conditions, but low confidence—concerned using translation services for IEPs and providing needed documents to families in their home language.

Table 2

Analysis Results for Importance, Confidence, and Supportive Conditions of Job Tasks

Patterns	# of tasks	%
Pattern 1: High perceived importance and confidence, but low supportive conditions (i.e., lack time and materials)	7	9.45%
Pattern 2: High perceived importance and confidence, and high supportive conditions (i.e., have time and materials)	1	1.35%
Pattern 3: High perceived importance under supportive conditions (i.e., have time and material), but low confidence	1	1.35%
Pattern 4: High perceived importance under low support conditions (i.e., lack time and material), and low confidence	35	47.29%
Pattern 5: High perceived importance, low confidence, enough time but not enough materials	14	18.91%
Pattern 6: High perceived importance, high confidence, enough time but not enough materials	15	20.27%

Discussion

This exploratory job analysis offers a task-level view of how ESN teachers experience their work. We extend the prior literature on special education working conditions (see O'Brien et al., 2019; Stark et al., 2022) by specifying those tasks viewed as most important and where perceived confidence and supportive conditions are most constrained. The fact that most respondents rated all but

one of the 74 tasks indicates a shared understanding ESN teaching as a complex position with broad instructional, coordination, and management responsibilities. At the same time, the one tasks that did not meet importance threshold—work related to implementing statewide assessments—suggests a potential disconnect between state accountability expectations and what ESN teachers perceive as meaningful in their daily work.

Additionally, these findings can help to clarify the ecology of ESN teaching. The task distribution by importance highlights that a substantial portion of ESN is inherently relational with 25 tasks are related to collaboration with other professionals or families, and 10 related to training and management. These findings align with prior research, describing ESN teacher's roles as dependent on cross-role coordination (e.g., service providers, multiple general educators) and on on-going family collaboration on behavior, communication, and the generalization of skills (Mortier & Aramburo, 2022; Turnbull et al., 2015). Further, ESN teachers routinely train paraprofessionals to implement supports throughout the day and, coordinate their work (Brock & Anderson, 2021; Douglas et al., 2016). From an ecological lens, ESN teaching is complex due to the number of responsibilities plus coordinating instruction, supports across people, routines, and settings.

In addition, nearly half of the tasks (47.29%) fell in pattern four—high importance but low confidence and supportive conditions (i.e., time and materials). Though these results are descriptive, this pattern is consistent with other studies (see Billingsley & Bettini, 2020) which define teacher effectiveness and retention on the alignment between role demands and supports available (e.g., logistical resources, social resources, and informational resources; Stark et al., 2022). These results suggest that the most consequential challenge for ESN teachers may be less about which tasks are important and more about whether teachers perceive they have the capacity and resources to carry out these tasks well.

Finally, this study underscores the need for logistical resources (time and materials) as well as social and informational supports, which could strengthen ESN teachers' confidence in carrying out their work. However, numerous studies point to gaps in administrative support for special educators (Bettini et al., 2015; Conley & You, 2017), including limited administrator understanding of the instructional and resource needs of students with ESN and their teachers as administrative responsibilities primarily focus on compliance (Aramburo & Rodl, 2020; Bays & Crockett, 2007).

Implications

Though this is a small exploratory study, it offers one of the first task-level examination of ESN teachers work and work conditions, which can inform the design of targeted policies, supports, and training. In practical terms, supports should match the ecology of ESN teaching, where instructional responsibilities are intertwined with collaboration, paraprofessional support, and family partnerships that require protected time, and appropriate materials and resources.

A first implication concerns time. The results suggest that insufficient time to implement important tasks is a major issue. Districts and administrators could respond by protecting time within the contracted day for essential non-instructional tasks (e.g., coordination, consultation, IEP development) by shifting some of these tasks to other school personnel (e.g., office administrators scheduling IEPs). A second implication relates to materials. The ESN teachers in this study reported a lack of materials which suggests that these teachers may not consistently have access to curriculum, assistive technology, and instructional resources required to deliver standards-aligns evidence-based instruction. Local education agencies can use task-level evidence to prioritize procurement and distribution of standards-based curriculum and ESN-specific instructional materials similar to general education.

Finally, a third implication concerns confidence, preparation, and continued learning. The results of this research suggest that many tasks ESN teachers view as important are accompanied by a lack of confidence, which indicates the need for better pre-service and in-service training and coaching. This is especially important considering the high number of interns and teachers on emergency credentials who assume full ESN teaching

responsibilities while still acquiring ESN-specific knowledge (Bettini et al., 2015). Providing high-quality inclusive education to students with ESN is a complicated endeavor as they are expected to become competent in a large number and a wide variety of tasks. Preparation programs and in-service training should address the instructional and include the non-instructional competencies that are specific to ESN teaching (e.g., collaboration, training and supporting paraprofessionals). Ongoing professional learning and coaching can support teachers in integrating specialized knowledge (e.g., Augmentative Alternative Communication [AAC], intensive behavior supports) into the classroom rather than treating them as standalone techniques. Having a task-level understanding of the scope of ESN teaching can inform teacher preparation, professional development, and workplace supports that the reflect what the job actually requires.

Limitations

The data set was limited in size (n = 66). Given the low response rate, respondents may fundamentally differ from non-respondents leading to possible response bias. In addition, the sample included teachers who left ESN positions within the last five years (18%), which could lead to response bias depending on the recollection of their classroom experiences. The findings also relied on self-reporting of task performance and supportive conditions; future studies could triangulate these results via observations, interviews on ESN teacher tasks, or artifact review (e.g., schedules, IEP documentation) to corroborate task demands and supports.

Additionally, this study recruited through three different sources: 1) graduates and intern teachers from the authors' credential program, 2) university colleagues' ESN programs, 3) and database of special educators developed in part by the first author. As a result, the sample was concentrated in California (54 of 66 respondents) and may not reflect the experiences of ESN teachers in other states. Differences in state standards, credentialing requirements, service delivery, and district resources may shape task priorities and perceived supports, limiting generalizability beyond the contexts represented in this study.

As noted, intern teachers were included as they serve as teachers of record and assume responsibilities comparable to credentialed teachers. Though interns comprised a small number of the sample (n = 4), they may experience confidence and supports differently due to being enrolled in preparation coursework and receiving mentorship which could influence their perception of tasks. Additionally, recruiting graduates from a single preparation program may introduce shared training experiences that influence how respondents interpret task importance and the confidence to execute it. Since incentives were administered through a decoupled survey, completed surveys were not linked to recruitment sources; therefore, response patterns across recruitment pathways could not be examined.

This study's survey design presents limitations in terms of reliability and validity. In terms of reliability, field tests were conducted to ensure clarity and appropriateness of task descriptors, yet respondents may have interpreted some item differently given the complexity and specificity of tasks derived from the TPEs and the O*NET model. Content validity might be affected by the omission and consolidation of TPEs and tasks; while needed to combat survey attrition, this process may have reduced coverage of distinct tasks.

Future Directions

This exploratory study is a steppingstone to broader, more in-depth research about the specific working conditions of ESN teachers. Future studies should include larger, more geographically diverse ESN teachers along with incorporating social validity methods (e.g., interviews) to capture ESN teachers' experiences of working conditions and their workplace needs in greater depth. Additional analyses could examine administrator support (e.g., principals, special education administrators), ESN teacher confidence, and working conditions, as well as potential differences by demographic and contextual factors (e.g., gender, years of experience, grade levels, geographic settings, teacher preparation, caseload, school culture).

In addition to the above future research, these patterns demonstrate an implication for teacher well-being—particularly the risk of demoralization. Though demoralization was not a key outcome of this study, the

complexity of ESN teaching, coupled with the lack of time and resources may lead to ESN teacher demoralization. Demoralization reflects working conditions that impede teachers' ability to conduct "good work" (Santoro, 2018, p. 44) that align with their professional commitments. These concerns make demoralization a ripe area for future research.

Funding

This study was funded by San Francisco State University via the Research, Scholarship and Creative Activities fund.

Acknowledgements

We would like to acknowledge all the ESN teachers who took part in this study for their time, effort, and energy.

References

Aramburo, C. M. & Rodl. (2020). Boosting school administrator confidence when evaluating special educators through district support and training. *Journal of School Administration Research and Development, 5*, 86–95. https://doi.org/10.32674/jsard.v5i2.3147

Bays, D. A., & Crockett, J. B. (2007). Investigating instructional leadership for special education. *Exceptionality, 15*(3), 143–161. https://doi.org/10.1080/09362830701503495

Bettini, E., Cheyney, K., Wang, J., & Leko, C. (2015). Job design: An administrator's guide to supporting and retaining special educators. *Intervention in School and Clinic, 50*(4), 221–225. https://doi.org/10.1177/1053451214532346

Billingsley, B. S., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research, 89*(5), 697–744. https://doi.org/10.3102/0034654319862495

Billingsley, B. S., & Bettini, E. (2020). Improving working conditions to support special educators' effectiveness: A call for leadership. *Teacher Education and Special Education, 43*(1) 7–27. https://doi.org/10.1177/088846419880353

Brock M. E., & Anderson E. J. (2021). Training paraprofessionals who work with students with intellectual and developmental disabilities: What does the research say? *Psychology in the Schools*, *58*(4), 702–722. https://doi.org/10.1002/pits.22386

Browder, D. & Spooner, F. (2014). *More language arts, math, and science for students with severe disabilities.* Brookes Publishing.

Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children, 37*(4), 681– 711. https://doi.org/10.1353/etc.2014.0032

California Commission on Teacher Credentialing (2018). *Preliminary Education Specialist Teaching Credential Standards and Teaching Performance Expectations.* California Commission on Teacher Credentialing.

Conley, S., & You, S. (2017). Key influences on special education teachers' intention to leave: The effects of administrative support and teacher team efficacy in a mediational model. *Educational Management Administration, & Leadership, 45*, 521– 540. https://doi.org/10.1177/1741143215608859

Douglas, S. N., Chapin, S. E., & Nolan, J. F. (2016). Special education teachers' experiences supporting and supervising paraeducators: Implications for special and general education settings. Teacher Education and Special Education: *The Journal of the Teacher Education Division of the Council for Exceptional Children, 39*(1), 60–74. https://doi.org/10.1177/0888406415616443

Firestone, A. R., Aramburo, C. M., & Cruz, R. (2021). Special educators' knowledge of high-leverage practices: Construction of a pedagogical content knowledge measure. *Studies in Educational Evaluation*, 70, 1–13. https://doi.org/10.1016/j.stueduc.2021.100986

Gilmour, A. F., & Wehby, J. H. (2020). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology, 112*(5), 1042–1060. https://doi.org/10.1037/edu0000394

Groves, R. M., Fowler, F. J., Couper, M., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). Survey methodology (2nd ed.). Wiley.

Hagaman, J. L., & Casey, K. J. (2018). Teacher attrition in special education: Perspectives from the field. *Teacher Education and Special Education, 41*(4), 277–291. https://doi.org/10.1177/0888406417725797

Hester, O.R., Bridges, S.A., & Rollins, L.H. (2020). 'Overworked and underappreciated': Special education teachers describe stress and attrition. *Teacher Development, 24*(3), 348–365. https://doi.org/10.1080/13664530.2020.1767189

Hunt, P., McDonnell, J., & Crockett, M. (2012). Reconciling an ecological curricular framework focusing on quality of life outcomes with the development and instruction of standards-based academic goals. *Research and Practice for Persons with Severe Disabilities, 37*(3), 139–152.

Mortier, K., & Aramburo, C. (2022). Collaborative teaming to support quality inclusive education for students with disabilities. Routledge. https://doi.org/10.4324/9781138609877-REE157-1

McDonnell, J., Hunt, P., & Jameson, M. (2015). Achieving equity and belonging: From segregated to inclusive education. In Agran, F. Spooner, K. Gee, & Trader (Eds), TASH: 40 years of progressive leadership: Washington, DC: TASH.

Nguyen, T. D., Pham, L. D., Crouch, M., & Springer, M. G. (2020). The correlates of teacher turnover: An updated and expanded meta-analysis of the literature. *Educational Research Review, 31*, 1–17. https://doi.org/10.1016/j.edurev.2020.100355

O'Brien, K. M., Brunsting, N. C., Bettini, E., Cumming, M. M., Ragunathan, M., & Sutton, R. (2019). Special educators' working conditions in self-contained settings for students with emotional or behavioral disorders: A descriptive analysis. *Exceptional Children, 86*(1), 40–57. https://doi.org/10.1177/0014402918689 46

Occupational Information Network (2022). Special education teachers. https://www.onetonline.org/find/result?s=special+teachers

Robinson, O. P., Bridges, S. A., Rollins, L. H. & Schumacker, R. E. (2019). A study of the relation between special education burnout and job satisfaction. *Journal of Research in Special Educational Needs, 19(*4), 295–303. https://doi.org/10.1111/1471-3802.12448

Santoro, D. A. (2018). Demoralized: Why teachers leave the profession they love and how they can stay. Harvard Education Press.

Stark, K., Bettini, E. Cumming, M., O'Brien, K. M., Brunsting, N., Huggings-Manley, C., Binkert, G., & Shaheen, T. (2022). Measuring special educators' working conditions: A systematic review. *Remedial and Special Education, 44*(2), 1–17. https://doi.org/10.1177/07419325221079015

Turnbull, A., Turnbull, H., Erwin, E., & Shogren, K. (2015). *Families, professionals, and exceptionality: Positive outcomes through partnerships and trust.* Pearson.

U.S. Department of Education. (2022). 2022 *annual report to Congress on Individuals with Disabilities Education Act (IDEA).* Office of Special Education and Rehabilitation Services.

Youngs, N., Jones, P., & Low, M. (2011). How beginning special and general education elementary teachers negotiate role expectations and access professional resources. *Teachers College Record, 113*(7), 1506–1540. https://doi.org/10.1177/016146811111300704

Appendix A

Job Tasks for ESN Teachers

Task #	Description
	Development and Adaptations of Instructional Strategies and Materials
1	Adapt/modify existing curriculum and individualize instruction to meet the individual needs of each student
2	Adapt instructional materials to meet the individual needs of each student and in a way that allows meaningful participation and progress on IEP goals and adapted academic goals.
3	Choose and obtain (accessing funding if necessary) appropriate evidence-based curriculum
4	Learn how to use a new curriculum.
5	Develop and implement individualized positive behavior support plans.
6	Clean up after different kinds of incidents (e.g., toileting accidents, messy art projects, destruction of class materials)
7	Adjust symbols on communication boards as needed.
8	Revise the communication goals regularly and include language related to academic content and to changing social situations.
9	Ensure that all students have (a) access to communication tools (objects, pictures, voice output communication aids, etc.) or systems appropriate to their unique needs, and (b) opportunities to use those communication tools and systems in age-appropriate social environments.
10	Develop routines and calendars that help students access the activities in the environment.
11	When appropriate, prepare student-led IEPs and support the student in providing input on the prioritized goals and learning environments.
12	Teach age-appropriate curriculum about self-advocacy and self-determination.
13	Teach job-related skills, social skills, and independent living skills (eg. travel training, cooking).
	Assessment and Development of Individualized Education Goals
14	Identify and adapt assessment tools taking into account specific student needs (e.g., deafblindness, complex communication needs, cultural and linguistic characteristics. behavior needs).
15	Receive training and implement alternate statewide assessments for ELA. Math, Science, and ELL.
16	Assess the students' psychosocial needs which includes communicating with the family and other team members.
17	Assess the students in different areas of academic achievement (literacy, math, social studies, science…).
18	Develop task-analyses and conduct task-analyses based observations for the identified/prioritized functional skills.
19	Conduct functional assessments to understand students' behavior when it is problematic.
20	Determine the students' current level of communicative competence by observing them in different settings, using existing tools.
21	Conduct an analysis of age-appropriate student environments (i.e., ecological assessment) to identify priority skills and goals that will facilitate the students' access in those environments.
22	Design progress monitoring tools/systems for all goals that can be used across all settings.
23	Input the data collected by the para-educators into the students' data systems.
24	Create self-monitoring tools and teach students to use self-monitoring tools.
25	Take and summarize student data to prepare for the IEP meeting.
26	Use assessment data to inform instruction, report present levels, and develop new goals.

27	Consult historical records from past providers whenever available.
	Training and Management
28	Consult historical records from past providers whenever available.
29	Train and coach staff on how to promote social and emotional well-being.
30	Train and coach staff on how to facilitate self-determined behavior and build independence.
31	Train and coach support staff and other staff (i.e., gen ed teachers, administrators) to implement behavior support plans with fidelity.
32	Train and coach para-educators on how to use assessment tools (e.g., progress monitoring, behavior, etc.) and follow-up with them frequently.
33	Train and coach staff, general educators, and peers to interact with the student.
34	Train and coach staff and general educators to teach communication goals throughout the day.
35	Train and coach staff on appropriate accommodations and modifications for each student in each of their learning environments.
36	Train and coach general education teachers on appropriate accommodations and modifications for each student.
37	Train and coach staff and general education teachers on how to provide inclusion support, including in-class modeling of such support.
	Collaboration with Professionals
38	Collaborate with an AAC specialist, and maybe an OT, PT, VI, SLP, to assess communicative competence and design/adjust AAC systems.
39	Collaboration with VI, DHH, Deafblind Specialists, O&M specialists, OT, and PT to analyze assessment data and implement recommendations.
40	Include perspective of psychologist, social worker, counselor when assessing the student.
41	Consult with PT (school-based or CCS) and parent/caregiver to request and schedule training in lifting and positioning.
42	Consult with ELD specialists (and/or receive ELD training) and communication specialists when making decisions about assessments for students who are ELLs.
43	Log any adverse health events during school day, analyze assessment data in collaboration with school nurse (and families), and implement recommendations.
44	Collaborate with behavior specialist to analyze behavior, and to design and adjust behavior support plans.
45	Build relationships with general education teachers to open communication and convey how the student can participate and be supported in their class.
46	Obtain feedback from general education teachers about the student's performance to support goal development.
47	Collaborate with the general education teacher to develop modifications and adaptations to lessons and assessments.
48	Integrate students' IEP goals in daily/weekly instructional plans in SPED and general education settings and with related service providers.
49	Create opportunities for general education teachers to learn from/collaborate with VI, DHH, AAC specialists.
50	Plan & deliver lessons with general education teachers.
51	Develop and communicate daily schedule for repositioning, medication, feeding needs, and toilet training.

52	Obtain feedback from para-educators on student performance to inform instructional strategies and IEP goals.
53	Develop a schedule of meetings & collaborative work sessions with para-educators.
54	Develop transition plans in collaboration with regional center case manager/vocational support agency.
55	Partner with community-based organizations to create and implement intern opportunities.
56	Develop familiarity with site-based and community-based resources that can support students and their families.
57	Coordinate involvement in the IEP of all site-based team members (related services providers, administrators, general education teachers) and community-based service providers (e.g., social worker, mental health provider, Regional Center case manager, etc.) who support the student with behavior, social, emotional, trauma, and/or mental health needs.
58	Find out how to access related service providers and other available supports for the different needs students have.
59	Coordinate with IEP team members to ensure adherence to mandated timelines for all IEP-related processes.
60	Facilitate IEP meetings, ensuring that all parts of the IEP are reviewed with sufficient time allotted for collaborative discussion.
61	Develop sub plans for both emergency and planned absences.
62	Ensure that staff have access to all equipment and supports needed to practice safe lifting and repositioning (e.g., back braces, Hoyer lift, etc.).
	Collaboration with Families
63	Build trust and connection with families by a) doing home visits, and/or b) organize person-centered planning meetings, and/or c) develop a person-centered planning questionnaires.
64	Set up an ongoing individualized communication system for interaction with the families.
65	Facilitate family's connection to site-based and community-based resources.
66	Inform families of their rights.
67	Provide the family with genuine opportunities to review and contribute to what is being proposed and decided upon in IEP meetings (before, during, and after the meeting).
68	Provide copies of all reports and IEP documents to families.
69	If needed, submit all documentation to translation services to provide all IEP documents to families in home language.
70	Seek the families' perspective when assessing the student.
71	Collaborate with the parents to ensure generalization of the IEP goals (behavior, communication, etc.) across different settings.
72	Collaborate with the parents to ensure AAC devices or systems are used consistently across settings.
	Continuing Education and Professional Development
73	Receive training (e.g., LEA's system of IEP writing IEPs, management of para educators, etc.)
74	Keep up to date with important changes in the field (e.g., federal law mandates/guidelines/court cases, evidence-based practices, new technologies, etc.)