

## ABSTRACT

Title of Dissertation:

UNDERSTANDING THE GAP: SCHOOL-BASED SPEECH-LANGUAGE PATHOLOGISTS AND THE UNDERUSE OF CLASSROOM-BASED SERVICES

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in Special Education Leadership, 2025

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Speech-language pathologists (SLPs) working in school settings deliver specialized support to children with speech-language impairments. This Capstone focuses on the work of school-based SLPs with their high-incidence language students working on receptive and expressive language in inclusion settings. It provides an examination of models of the use of evidence-based research, the factors influencing SLP-teacher collaboration and service delivery, and the barriers contributing to the underuse of classroom-based service delivery. Section One introduces the problem, outlining its historical context and continued importance in current practice. This section also presents the problem of practice and the five guiding research questions. Section Two, the literature review, provides a comprehensive overview of current and historical research related to service delivery in schools. It includes findings from empirical studies and surveys

conducted with SLPs that highlight long-standing issues affecting current practice. Section Three outlines a proposed multi-level framework for increasing the use of classroom-based services at the national, state, district, and school levels. Drawing from the literature and Kotter's (1996) *8-Step Process for Leading Change*, this section addresses action priorities that create a sense of urgency and build a coalition for sustained change across all levels. Benchmark change and projected outcomes for each level provide possible next steps for implementation. Section Four summarizes the project's findings as well as provides critical actions and practical recommendations to support the integration of classroom-based services. Section Five describes a final product for presentation at conferences and meetings and an accompanying dissemination that includes an informational poster, along with audience-specific resource pamphlets (e.g., national, state, district, or school level professionals). These materials are designed to communicate the Capstone's findings and recommendations to practicing SLPs and other stakeholders in the field.

*Keywords:* speech-language pathologist, high-incidence language students, school-based, collaboration, classroom-based service delivery, inclusion

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## **Dedication and Acknowledgments**

This paper is dedicated to Craig Robert and Kevin Michael, for whom I went into this field in the first place.

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## **List of Abbreviations**

AAC	Augmentative Alternative Communication
ABA	Applied Behavior Analysis
ANOVA	Analysis of Variance
ASHA	American Speech-Language-Hearing Association
CCC	Certificate of Clinical Competence
CT	Classroom Teacher
EBP	Evidence-Based Practice
EHA	Education for All Handicapped Children
ERIC	Education Resources Information Center
FAPE	Free Appropriate Public Education
HGLM	Hierarchical Generalized Linear Modeling
ICBS	Integrated Classroom-Based Services
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Education Plan
IPE	Interprofessional Education
IPP	Interprofessional Practice
LEA	Local Education Agency
LRE	Least Restrictive Environment
MAGIC	Maximizing Academic Growth by Improving Communication
MTSS	Multi-Tiered System of Supports
OESE	Office of Elementary and Secondary Education
OSACS	Overseas Association of Communication Science

OSEP	Office of Special Education Programs
PASW	Predictive Analytics Software for Windows
PCA	Principal Component Analysis
PD	Professional Development
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RTI	Response to Intervention
SDM	Service Delivery Model
SEAs	State Education Agencies
SPDG	State Personnel Development Grants
SIDM	School-Based Intervention Decision-Making
SLP	Speech-Language Pathologist
TDF	Theoretical Domains Framework of Behavior Change
VST	Vocabulary Intervention Approach

## Section 1: Identifying the Problem

### History of the problem

School-based speech-language services in the United States began in the early 1900s, when Boston teachers trained as speech specialists to support children who stuttered. The success of the Boston program led to similar services starting in other major cities, including New York City and Los Angeles. At the time, most speech teachers were graduates of normal schools for teacher education and had to independently acquire the knowledge and skills necessary to address a wide range of speech difficulties (Duchan, 2010).

A 1916 survey of children in Madison, Wisconsin, showed that speech problems of students included stuttering, lispings, thick speech, motor aphasia, mutism, and nasality. A notable exception to the general lack of formal training was the University of Wisconsin; the program offered coursework to prepare teachers to address speech disorders (Duchan, 2010).

In 1915, Professor Robert McDonald identified three service delivery options for students with speech difficulties: boarding school (private institutions), itinerant therapy, and self-contained classes. The introduction of the itinerant model (the early form of the pull-out model) occurred as early as 1910. By 1966, all 50 states mandated speech services in elementary schools. Still, there was little discourse around alternative service models until the passage of the Education for All Handicapped Children Act (EHA) (Public Law 94-142) in 1975 (Duchan, 2010).

Even then, most services remained deficit-focused, disconnected from students' broader educational experiences. In the late 1970s, however, rural schools began experimenting with having speech-language pathologists (SLPs) support language development within the classroom. SLPs and teachers in rural Maine had a consulting relationship to help the teacher

build their classroom language development (Pickering & Kaelber, 1978). This marked the beginning of an emerging focus on classroom-based collaboration.

As EHA moved through reauthorizations in 1986 and 1990, the new Individuals with Disabilities Education Act (IDEA) began including early intervention services, transition plans, and the addition of traumatic brain injury and autism under its umbrella (US Department of Education [DOE], 2024). Following IDEA, the United States governing body for SLPs, the American Speech-Language-Hearing Association (ASHA), gave its official support for a collaborative and integrated service delivery in 1991. ASHA noted that a natural setting for services could include school or home, and services could be from a teacher or parent with support or collaboration from an SLP (Elksnin & Capilouto, 1994). The movement toward more alternative service delivery models and the use of classroom-based collaboration and services seemed to be happening. However, in its 1996 technical report on inclusion therapy, ASHA admitted that many critical questions still existed in relation to inclusive services for SLPs, including impacts on non-disabled peers, the need for educational preparedness, administrative support, and personnel qualifications. The next reauthorization of IDEA in 1997 included an emphasis on access to the general curriculum for all students on an Individualized Education Plan (IEP) (DOE, 2024). The reauthorization marked a significant shift for SLPs, urging them to align services with the general education curriculum better and promote inclusion-based practices (Whitmire, 2002). Early researchers agreed that SLPs should provide therapy in a more natural setting and that teachers could provide therapy with the support of an SLP. They also presented issues that included the need for professional training as well as identifying the advantages of classroom-based services (Whitmire, 2002).

Along with the changes brought forth through EHA and IDEA, the 2017 case of *Andrew*

*F. v. Douglas County School District* brought changes to the meaning of compliance with the procedures of IDEA and what level of educational benefits must occur for a child to receive a Free Appropriate Public Education (FAPE) (DOE, 2024). Until 2017, access to FAPE required an IEP that provided some level of educational benefit; however, after *Andrew F.*, special education providers, including SLPs, had to ensure their programs moved from a “reasonably calculated” IEP to a place where “[t]o meet its substantive obligation under the IDEA, a school must offer an IEP reasonably calculated to enable a child to make progress appropriate in light of the child’s circumstances. This standard is more demanding than the “merely more than de minimis” test (*Andrew F. v. Douglas County School District Re-1*, 2017). Chief Judge Roberts, in his opinion of the court, stated, “[t]hese procedures emphasize collaboration among parents and educators and require careful consideration of the child’s individual circumstances”. For families, this ruling emphasizes the central role of parents in IEP development (*Andrew F.*, 2017). For SLPs, this decision reinforced the responsibility to provide services that had a focus on higher expectations, meaningful progress (*Andrew F.*, 2017), and a shift towards the use of the most appropriate setting for their high-incidence language students. Students who receive pull-out language services, rather than classroom-based services, may be denied the opportunity to make meaningful progress and the higher expectations for FAPE. Although federal laws and IDEA have gone through changes since the 1990s, the research supporting classroom-based therapy remains limited for SLPs.

### **Role of the SLP**

Today, SLPs in the United States continue to be governed by ASHA. Before providing services, an SLP must obtain a master’s degree, pass the Praxis Examination for Speech-Language Pathology, and earn their Certificate of Clinical Competence in Speech-Language

Pathology (CCC-SLP), as seen in Figure 1 below. Although ASHA membership is not mandatory, many states accept ASHA CCC as proof of meeting some requirements for licensure (American Speech-Language-Hearing Association [ASHA], n.d.). Graduate training for SLPs in most university programs has a general focus, allowing SLPs to pursue employment in various settings, including schools, hospitals, nursing homes, and rehabilitation centers, and continue to work with people throughout their lifespan, as seen in Figure 2 below. Within the school setting, SLPs work with students covering a broad range of disabilities from speech articulation, learning disabilities, and language disabilities (high-incidence disabilities) to autism, intellectual disabilities, and multiple disabilities (high-intensity disabilities). According to ASHA's *Scope of Practice in Speech-Language Pathology*, services must be delivered with appropriate frequency and intensity in accordance with best practices and the demands of the setting (ASHA, 2016). Additionally, ASHA (1996, 2000, 2010) emphasizes that SLPs must contribute to the provision of FAPE in the Least Restrictive Environment (LRE) for students with communication disorders in school settings. All 50 states, the District of Columbia, and some U.S. territories require state licensure. Currently, nine states require additional coursework or testing for state licensure, such as Connecticut's mandate for specialized training in working with children with special needs in the general education classroom (ASHA, n.d.). According to ASHA (2022), over 50% of SLPs have chosen to work in schools, but only 18% of states have shown some movement towards graduate school-level specialized training for SLPs working in education (ASHA, n.d.).

**Figure 1:***Being a Speech-Language Pathologist***How to Become Speech-Language Pathology Certified**

[www.careeremployer.com](http://www.careeremployer.com)

**Figure 2:***Who needs a Speech-Language Pathologist*

[https://national360.com.au/speech-pathology-across-](https://national360.com.au/speech-pathology-across-the-lifespan/)

*the-lifespan/*

The role of a school-based SLP encompasses a wide range of skills, including assessment, diagnosis, and treatment of articulation, fluency, voice, and language disorders. Within the area of language, SLPs provide services in the areas of receptive, expressive, and pragmatic language. Receptive language services often focus on areas such as comprehension, following directions, grammar, and vocabulary. Expressive language intervention targets skills related to vocabulary, such as understanding word relationships and sentence structure, including

phonemic awareness, syntax, and morphology. Pragmatic language support helps students develop appropriate conversational skills, understanding of social rules, and effective use of nonverbal communication skills. It also incorporates receptive and expressive skills that help in social interactions. SLPs develop IEP goals that align with curriculum standards that relate to vocabulary and comprehension, and use evidence-based therapy approaches, including narrative-based approaches, to support those goals.

Within schools, SLPs have the flexibility to choose a service delivery model tailored to each student. The two most common models are pull-out therapy and classroom-based (push-in) services, often during language arts and history classes. However, according to the *ASHA Schools Survey Report* (2020), between 2014 and 2020, SLPs spent an average of 18 to 20 hours per week providing pull-out therapy, compared to only 5.4 hours per week offering classroom-based services. Despite the 2016 *ASHA Scope of Practice* identifying collaboration as a key domain for achieving functional outcomes, SLPs rarely provide services in the general education setting, even for students who would benefit from services in inclusive settings. During this same period, caseload sizes remained consistent, and students with language disorders continued to represent the largest subgroup of those receiving services.

### **Effects of the Underutilization of Classroom-Based Service Delivery**

For over a century, SLPs have provided services in schools using a pull-out model to work on goals and objectives; however, it has only been in the past few decades that SLPs have begun working within the classroom (Duchan, 2010; Elksnin & Capilouto, 1994). Adaptation to a classroom-based therapy model has been slow and inconsistent (Archibald, 2017). The pull-out model, while familiar, is a more restrictive environment than the classroom; students miss curriculum presentations and social interactions, and therapy activities may focus on tasks

unrelated to classroom instruction (Ehren, 2000). In contrast, when SLPs work in the classroom, they can see the whole child, add value and language expertise to lessons, and assist in moving goals toward generalization in a more natural setting (Heisler & Thousand, 2021; Mount, 2014). Dixon (2013) and Elksnin and Capilouto (1994) found that those SLPs doing inclusion therapy agreed that working in the classroom promoted better skill generalization, improved carryover skills, ensured greater continuity with less disruption to their classroom lessons, and reduced labeling since students remained in the room. The articles also noted that SLP-teacher collaboration allowed teachers more time to support their IEP students, increased SLPs' knowledge and skills, and improved their knowledge of language activities in the classroom (Dixon, 2013; Elksnin & Capilouto, 1994).

ASHA's (1996) policy on inclusive practices was an important step toward the inclusion movement. Researchers have discussed inclusion and the classroom-based service delivery models since before the 1990s, but they have produced limited evidence demonstrating the effectiveness of these approaches. Earlier studies offered a more positive outlook on classroom-based service delivery. For example, Miller (1989) discussed the use of the new model of classroom-based services by presenting five methods for language specialists and teachers to collaborate. She also discussed the overall development of classroom-based service delivery at that time. Elksnin and Capilouto's (1994) survey revealed several benefits of integrated services, including improved carryover of communication skills and consistent access to academic instruction. More recent studies, however, present a less optimistic view. McGinty and Justice (2006) stated that SLPs should rely on reason-based practice and their data to make decisions. Archibald (2017) noted that although studies on collaboration and classroom-based therapy show promise, particularly in early childhood settings, there was limited evidence for older students.

Brandel (2020) emphasized the persistent gap in research, even nearly a decade after first identifying the issue in her 2011 study with Frome Loeb (Brandel & Frome Loeb, 2011). As a result, many SLPs remain uncertain about how to differentiate services or select the most effective delivery model for students with language needs (Cirrin et al., 2010).

Since the inception of FAPE and the LRE mandate in 1975, SLPs' service delivery has not evolved to reflect a greater use of LRE for speech and language services. Instead, pull-out therapy, which takes students in inclusive or LRE settings out of those settings, has remained the predominant approach. The continued reliance on pull-out therapy impacts students' access to the general education curriculum, their social development, and ultimately their right to FAPE. Providing services in a more restrictive environment often fails to meet the educational needs of students with speech and language impairments, thereby limiting their overall educational experience. A school-based SLP's primary goal is to provide FAPE by always working towards providing services in the LRE for all their students. ASHA promotes the use of LRE and the provision of FAPE through its inclusive practice policies and role guidelines (ASHA 1996, 2000). However, internal and external barriers from schools and educational systems often impede an SLP's ability to provide a consistent LRE and appropriate FAPE for all students.

SLPs frequently report significant barriers that limit their ability to implement classroom-based services. Mount (2014) found that SLPs lacked the willingness to provide services outside their comfort zone and were not willing to advocate for the service to encourage their coworkers to participate in interprofessional collaboration. She also noted the skepticism of parents, as the pull-out model is more familiar to them. In Pollack Zurawski's (2014) article, the author discusses the inconsistent focus on matching goals with the curriculum, leading to the development of bigger curriculum gaps for speech and language students who receive pull-out

therapy. Her article focuses on the first step towards moving to a classroom-based service, but she admits SLPs do not have much compelling evidence and will need to take part in a significant paradigm shift for it to happen.

Bauer et al. (2010) wrote an article to assist teachers who want to collaborate with SLPs. She focused on the need for continuity of care for students with disabilities and how inclusive services help ensure that happens. She also focused on the difficulty in finding time to schedule and plan for collaboration. Within their 20 practical strategies, Bauer et al. (2010) present strategies to work through common collaboration barriers, including getting administrative support, learning about and maintaining your roles and responsibilities, and being flexible in implementing classroom-based services. These same barriers were repeated by Dixon (2013), as she noted that factors other than student needs were affecting the slow movement towards the use of push-in service delivery models. She focused on the lack of understanding by school professionals who saw speech as work on articulation, as well as the complication of school organizational barriers: the number of rooms students are in, general caseload sizes, and the lack of preservice and professional training SLPs receive about collaboration and classroom-based service delivery.

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Recently, through a conversation with Tiffany White and Aruna Hari Prasad, Senior and Associate Directors of School Services in Speech-Language Pathology for ASHA, respectively, the author received updated information on the effects of problems around the implementation of classroom-based services (T. White & A. Hari Prasad, personal communication, May 12, 2025). An as-of-yet-published survey from September 2024 revealed the continued reluctance of school-based SLPs to provide classroom-based services. The reasons cited included workload management, the ability to shift from pull-out services to classroom-based services and not knowing 'how' to provide services due to a lack of training in undergraduate and graduate programs. They noted that this survey, completed by between 200 and 300 ASHA-certified SLPs, showed that there had been minimal improvement in shifting how SLPs provide services despite all the work ASHA has done to help people understand how to vary service delivery and the importance of using varied service delivery models.

## **Purpose of the Study**

The purpose of this doctoral Capstone is to investigate the underuse of classroom-based service delivery models by school-based SLPs, with particular attention to how service delivery practices have evolved following the *Endrew F.* 2017 decision and the resulting change to the definition of FAPE. This Capstone investigates the problem of practice that, although students with speech-language impairment have the right to FAPE and to receive services in the LRE, schools often struggle with implementation related to speech-language inclusive classroom services. All students, including those with high-incidence disabilities and IEP goals that focus on language, have the right to an appropriate education, ensuring that SLPs address the receptive and expressive language goals in the most supportive environment. Services provided within the LRE of a general education setting allow the student and SLP to focus on the curriculum in their natural environment while finding opportunities to work on predetermined language goals, and it is more effective regarding generalization of skills (McGinty & Justice, 2006). As a critical related service in supporting children with IEPs, SLPs must consider the environment that will best meet the needs of their students, including settings that may include a general education classroom, lunchroom, the playground, or school clubs and activities. Although classroom-based services often represent the LRE for many high-incidence language students, they may not be appropriate for every learner or every skill area. For some students, targeted pull-out services or a combination of services may be needed, depending on the nature and intensity of their language needs. To accomplish this, SLPs in schools can choose from two service delivery models, pull-out or classroom push-in, to honor their students' IEPs.

Research, however, is limited, as there is a lack of evidence-based research available that discusses which service delivery model is most effective for different student needs. Cirrin et al.

(2010) conducted research focusing on the lack of evidence supporting various service delivery models. Of the 16 categorical areas they identified, studies existed for only five. The authors concluded that the limited amount of high-quality research restricts school-based SLPs from making informed, evidence-based decisions and emphasized a lack of adequately designed studies with direct clinical implications for practice. Similarly, McGinty & Justice (2006), in their comparison of classroom-based and pull-out models of language intervention, identified only three relevant articles that met their inclusion criteria, including Throneburg et al. (2000).

SLPs strive to ensure that they always prioritize their students' needs, but the optimal service delivery for SLPs remains poorly understood (Cirrin et al., 2010). Barbara Ehren (2000) raised early concerns about the challenges SLPs face working inside the classroom, discussing the importance of maintaining a therapeutic focus in all settings. Building on this, later authors provided practical strategies and collaborative models for transitioning from pull-out to classroom-based therapy through tutorials (Heisler & Thousand, 2019; Mount, 2014; Pollack Zurawski, 2014). These authors presented strategies for initiating the collaborative process but also acknowledged potential disadvantages and barriers. SLPs have noted that they desire a "how-to manual" for classroom-based services (Cirrin et al., 2010), and while these guides and tutorials provide valuable "how-to" support for classroom-based interventions, a critical question remains: What other factors might be contributing to the underuse of classroom-based service delivery models? Despite having access to materials, SLPs continue to rely on pull-out therapy (*ASHA Schools Survey Report*, 2020). SLPs aim to provide services in a setting that promotes the greatest language growth for each student, whether that growth occurs within the pull-out environment or within the academic demands of the classroom. Determining where students make the most worthwhile progress in receptive and expressive language development remains

central to selecting an appropriate service delivery model. Given that SLP services should reflect LRE, it warrants further investigation as to why SLPs' average weekly hours providing pull-out therapy (18-20 hours) far exceed those spent on classroom-based services (5.4 hours), an average which remains unchanged between 2014 and 2020, even after the *Endrew F.* (2017) decision (*ASHA Schools Survey Report, 2020*).

Although students with speech-language impairments have a legal right to receive services in the LRE, pull-out services continue to dominate practice. Pfeiffer et al. (2019) wrote that according to ASHA data from 2018, SLPs provided 20.2 hours of pull-out therapy per week as compared to 7.3 hours of classroom-based services. While the amount of pull-out time slightly decreased between 2018 and 2020, the amount of classroom-based service time significantly reduced by an average of two hours per week. Ritzman et al. (2006) cited ASHA's 2006 data, which indicated that SLPs provided 21 hours per week of pull-out and only four hours per week of classroom-based services. Despite a 12-year gap and updates to the definition of the delivery of FAPE, the shift toward increased classroom-based service delivery has remained minimal, while special education continued services towards LRE and a properly delivered FAPE. Despite these benefits, research to guide SLPs in determining the most effective delivery model remains scarce (Cirrin et al., 2010; McGinty & Justice, 2006).

This Capstone aims to investigate the underlying causes of the underuse of classroom-based service delivery, lack of training and professional development, minimal administrative support, and the availability of evidence-based guidance. These barriers to collaboration and professional preparation affect an SLP's ability to guarantee FAPE and LRE.

### **Positionality Statement**

Classroom-based therapy is a service delivery model available to all school-based SLPs;

yet, upon analyzing my professional practice, I found that I rarely selected this model when providing services to students. I realized that I had never critically reflected on why I so infrequently utilized classroom-based therapy as a service delivery model. Through a deeper exploration of the research on service delivery models, it became evident that a broader issue exists: School-based SLPs generally do not choose to implement classroom-based services.

As integral members of the special education team, SLPs must address FAPE and provide services in the LRE, adjusting IEP goals and service delivery as students grow and their needs evolve. Therefore, the problem of practice addressed in this project focuses on the underutilization of services within the general education environment, the factors contributing to underutilization, and strategies to better support a student's FAPE and a service delivery that supports their LREs.

### **Research Questions**

RQ1. What classroom-based service delivery models are supported by evidence-based research for the language goals of students with high-incidence disabilities?

RQ2. Why don't SLPs provide more classroom-based vs pull-out services for their students with language goals?

RQ2a. What administrative actions can support SLPs in providing services in the LRE?

RQ2b. What factors influence an SLP's choice of service delivery environment?

RQ2c. What training is needed for SLPs and teachers to provide more classroom-based service delivery?

## Method

### Search Procedures

A comprehensive search procedure identified articles and studies relevant to the research focus on SLPs and service delivery options in the school setting. The author conducted initial research on the ASHA professional website, exploring ASHA publications and four of its core journals: *American Journal of Speech-Language Pathology*, *Journal of Speech, Language, and Hearing Research*, *Language, Speech, and Hearing Services in Schools*, as well as *Perspectives of the ASHA Special Interest Groups*. To expand the research, the author used the University of Maryland Library's electronic database services' advanced search feature. The author accessed peer-reviewed journal articles and dissertations.

The primary database used was the Education Resources Information Center (ERIC), with additional searches conducted via Google Scholar to identify sources not indexed in ASHA databases. A strategic combination of Boolean terms (AND, OR) helped to refine the search. To meet the inclusion criteria, articles needed to include keywords such as *service delivery model* (with truncation *service delivery\**), *collaboration*, *inclusion*, or *classroom-based*, in conjunction with the term *school*. Article searches within the ASHA publications are geared towards SLPs, so additional search terms such as *SLP* and *speech-language* (with truncation *speech-language*) \* were used to refine results outside the ASHA database to ensure SLPs performed the services within the article. Additionally, the author performed ancestral searches by reviewing the reference lists of articles to identify relevant articles published within the last 35 years. Following the use of keyword combinations and relevant abstracts, the search included articles published from 1975 through 2025. It was limited to peer-reviewed journal articles written in the

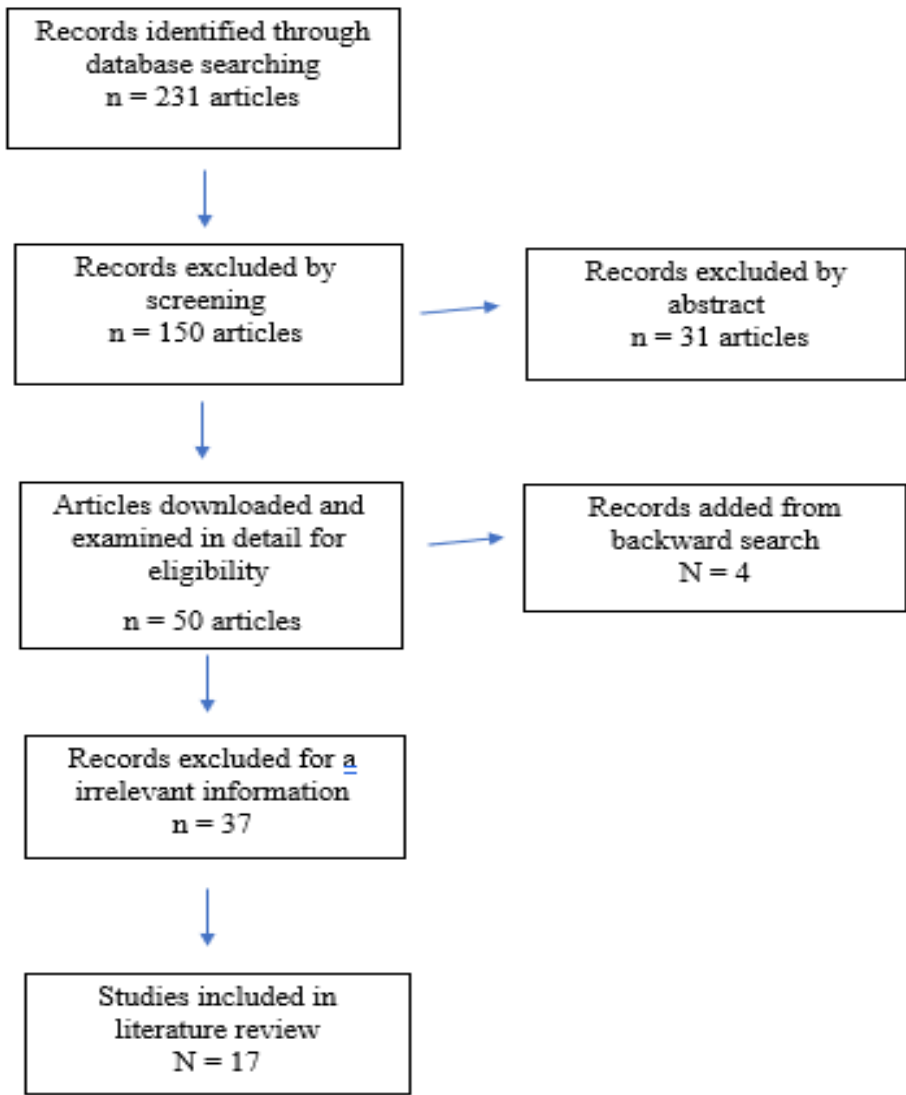
English language, including the journals *Child Language Teaching and Therapy* and *Communication Disorders Quarterly*.

This collection of articles focuses on research and surveys discussing classroom-based language services delivered in school settings in the United States. Those studies that focused only on articulation or phonology were dismissed. Studies on classroom-based therapy as a service delivery model were included if they used evidence-based practices such as systematic reviews, surveys, quasi-experimental designs, single-subject designs, or mixed-methods approaches. Peer-reviewed articles published from 1975 onward were considered, with the majority (12 out of 17) published between 2018 and 2025. Five earlier articles, published between 1999 and 2011, were included due to their relevance and contribution to foundational knowledge in this area.

Exclusion criteria included articles containing keywords such as "*tele*" (e.g., telepractice/teletherapy), "*dys*" (e.g., dysfluency), *aug\** (e.g., augmentative/alternative communication or AAC), or "*voice*." Exclusions also occurred on studies focused on services delivered outside the United States; studies focused only on students in the preschool setting, or those examining only pull-out service delivery models. Further exclusions occurred on ASHA-published articles labeled as 'viewpoint', 'review article', or 'clinical viewpoint' due to their lack of use of evidence-based research practices.

**Figure 3**

*PRISMA Figure*



**Search Outcomes**

A multi-phase screening process was employed to refine the pool of relevant studies for this Capstone project, as seen in Figure 3. The initial database search yielded 231 potential articles. The author imported all citations into Mendeley for reference management and duplicate removal. Title screening resulted in the exclusion of over 150 articles due to irrelevance or the

presence of exclusion criteria. The criteria prompted the removal of several articles that included terms such as *fluency*, *AAC* (augmentative and alternative communication), or *online*. The search process initially captured these articles because the search terms overlapped with synonyms or acronyms. The author excluded other articles because they included research conducted in English-speaking countries outside the United States.

An abstract review led to the exclusion of an additional 31 articles that did not meet the study's focus. Approximately 50 full-text articles were then downloaded and examined in detail for eligibility. Backward citation tracking from this set identified four additional potentially relevant articles.

The author excluded 37 full-text articles for a lack of focus on speech-language pathology, non-empirical content (e.g., tutorial or conceptual papers), an emphasis on articulation or pull-out service models, or a primary focus on preschool populations. Ultimately, the author selected 17 studies, as seen in Table 1, that met all inclusion criteria and included them in the results section.

## **Procedures**

The research articles included in the Capstone fell into two primary categories. The first category consisted of three experimental studies of SLPs conducting classroom-based services. The second category included 14 surveys and literature review studies that examined barriers to more classroom-based service delivery implementation. The literature reviews both focused on experiences and perceptions of SLPs and collaboration and contained 18 (Armstrong et al., 2023) and 26 (Evans et al., 2025) studies. Eight studies consisted of surveys ranging from 38 to 1897 participants, five of which were sent nationwide, two distributed statewide, and one distributed within a college class. Of the eight surveys, three included information gathered from other

professionals (administrators and teachers). The author systematically reviewed each article using a coding sheet based on the type of research. Then, the author summarized each article into three paragraphs: (1) basic information, purpose, and research questions, (2) study analysis and treatment groups, and (3) findings. The author continued by organizing the findings related to barriers according to the two research questions. Then it was categorized systematically on a personalized table. Since many studies identified overlapping concerns, the author placed each one in the section where its primary focus or most significant barrier appeared.

## Section 2: Comprehensive Research Review

Classroom-based service delivery is an increasingly recommended model for SLPs working in schools to meet the ever-increasing needs of students with speech-language disabilities and the demands of inclusive classrooms (Archibald, 2017; Green et al., 2019). This approach allows SLPs to collaborate directly with teachers in the classroom setting to address students' language goals in academic and social contexts. Despite strong endorsements from ASHA, widespread implementation remains limited (ASHA, n.d.-b; Green et al., 2019). This literature review synthesizes research on the effective models of evidence-based practices for classroom-based services, and the barriers to implementation, which include administrative and organizational barriers (scheduling, willingness), factors shaping service delivery, and gaps in training and professional development.

**Table 2**

### *Literature Review Article Results*

Author	Design	Results
<b>RQ1: Effective Models of Evidence-Based Research for Classroom-Based Intervention</b>		
Farber & Klein (1999)	Quantitative	Results showed that weekly classroom intervention with the MAGIC program significantly improved students' listening, vocabulary, cognitive-linguistic skills, and writing abilities, especially in the areas of mechanics and spelling.
Throneburg et al. (2000)	Experimental Study	The collaborative model was most effective for teaching curriculum vocabulary to speech-language students. In contrast, both collaborative and classroom-based models were shown to be significantly better than regular instruction for students who did not receive services.
Mitchell et al. (2022)	Quasi Experimental	Collaboration between SLPs and teachers produced stronger gains with large effects across all vocabulary tasks (especially on WIC), whereas the comparison condition showed large effects only for Synonyms and medium effects for WIC and Non-Example Tasks.
<b>RQ2: Classroom-Based Service Delivery Model Barriers</b>		

RQ2a: Organizational and Administrative Challenges		
Pfeiffer et al. (2019)	Quantitative	Few school-based SLPs engaged in IPP during evaluations (8%), eligibility meetings (43%), and intervention sessions (14%). Collaboration was most influenced by prior training, experience, and school setting. Common barriers included scheduling demands (48%), resistance from other professionals (23%), and lack of administrative support. (11%).
Carlin (2022)	Mixed Methods	SLPs and principals shared views on the effectiveness of ICBS, the value of the SLP–teacher relationship, and the need for administrative support. They differed on issues such as targeting speech goals, behavior management, student grouping, and data collection.
Heilman et al. (2024)	Deductive Qualitative Analysis	The study provided information on how curriculum-based assessments aligned with academic standards help determine a student's present levels of academic performance. They discussed how adopting an inclusive mindset helps to align services to meet students' needs, making sure those IEPs promote students' access, engagement, and progress in age or grade-level curriculum and environments.
Evans et al. (2025)	Systematic Literature Review	The review synthesized findings into six themes: (a) purpose, definitions, and collaborative activities; (b) perceptions of collaboration; (c) engagement in collaboration; (d) facilitators and barriers; (e) collaboration in telepractice; and (f) various findings across demographic factors.
RQ2b: Factors Influencing Service Delivery Choice		
Brandel and Frome Loeb (2011)	Quantitative non-experimental	SLPs primarily based service recommendations on student characteristics, reporting that they provided group intervention 2-3 times a week for students with moderate to severe disabilities and once per week for students with mild disabilities for 20-30 minutes.
Brandel (2020)	Quantitative	Similar to previous findings, students primarily received services in groups outside the classroom once or twice a week for 20–30 minutes. Service decisions varied with the SLPs' caseload size and graduation year, with most SLPs making two different decisions across severity levels, while almost one-third made the same decision across service locations.
Armstrong et al. (2023)	Mixed Methods	Six main themes were identified: professional contributions, the value of collaboration, sharing is collaboration, educational context, and influences on collaboration, with a core concept of establishing and maintaining collaborative relationships to enhance the IPP experience.

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 RQ2c: Training and the Bridge Gap
 

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Ritzman et al. (2006)	Ethnographic Examination	Through interviews and observation, five themes emerged: service delivery, curriculum-based intervention, scheduling, collaboration, and advocacy. These offered practical ideas for implementing inclusive and collaborative classroom practices.
Green et al. (2019)	Mixed Methods	Over half of the respondents served 1%–25% of their caseload through an inclusion model, mostly to address language and social skills, yet more than 60% reported that inclusion was ineffective for most of their caseload. Teacher collaboration and planning time were the strongest predictors, as well as challenges to collaborative success. Lack of training was not a predictor of use of classroom-based services.
Brimo & Huffman (2023)	Mixed Methods	Most SLPs and teachers reported using a combination of collaborative and noncollaborative service delivery models. Teachers rated their experience with collaboration more positively than SLPs, but they were not as likely to identify SLPs as collaborative partners. Both groups reported similar barriers; however, SLPs more often identified roles and responsibilities and training on collaboration as barriers.
Poll & Hoffman (2024)	Convergent Mixed Methods	Quantitative findings showed that attitudes towards promoting language did not change, though participants agreed more strongly that SLPs should participate in classroom activities and that other professionals can support language goals. Qualitative findings showed there was more focus on SLP practices as part of classroom activities, identified barriers focusing on caseload, communication, and role-understanding, and focused on the need to foster better communication and collaboration skills between professionals.
Koutsoftas et al. (2018)	Mixed Methods	Triangulation of interviews of program stakeholders, teacher surveys, and descriptive data about graduate student activities and children receiving speech and language services indicated that the pilot program was successful, with possible future modifications including longer rotations and adjusted supervision levels for the second year.
Heilman & Bertone (2021)	Mixed Methods	Respondents valued the applied aspects of their preservice and noted that early-career SLPs require significant support with school-based responsibilities such as IEPs, interprofessional practice, and scheduling. A priority was placed on professional development and research needs on practical topics that directly relate to school-based practice.

Pfeiffer et al. (2025)	Quantitative	This study found four main findings: (a) SLPs felt most knowledgeable about collaborating with teachers during IEP development, but least knowledgeable about implementing collaborative instruction in the general education classroom; (b) most received in-service training, but the timing of training did not relate to perceived knowledge; (c) most perceived support from principals and special education administrators, but only approximately 25% agreed that general education teachers valued or felt prepared for collaboration, and (d) SLPs' perception of the value of collaborative instruction was correlated with environmental support.
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### **Effective Models of Evidence-Based Research for Classroom-Based Interventions**

Classroom-based service delivery models, in which SLPs collaborate directly with teachers in the general education environment, have shown promising results in improving language outcomes for students. The research work of Farber & Klein (1999), Mitchell et al. (2022), and Throneburg et al. (2000) discusses the first posed research question of this Capstone by highlighting the importance of collaborative planning, shared instruction, and integration of SLPs and educators in enhancing language development in the classroom.

The quantitative study by Farber and Klein (1999) focused on implementing the *Maximizing Academic Growth by Improving Communication* (MAGIC) program across 12 kindergarten and first-grade classrooms in six schools. The purpose of the experiment was to identify students with language-learning difficulties, develop a series of support programs to increase teacher-therapist collaborative intervention, and increase parental support. They also wanted to determine if students in this language-enriched environment would outscore their peers in a control classroom on a standardized assessment. Their three goals focus on building oral language, vocabulary development, and appropriate syntax and semantics skills to improve literacy skills, encourage higher levels of thinking, and improve communication skills within the classroom curriculum.

The team found 552 students to participate in the study, and the researchers divided them into three groups. Treatment Group 1 (T1) had 273 students, Treatment Group 2 (T2) had 46 students, and the control group had 233 students. Students in T1 received collaborative lessons from the teacher and an SLP for 2.25 hours per week (Farber & Klein, 1999). Also, parents of students in T1 attended an educational workshop and received follow-up materials and resources. Students in T2 were randomly selected control group students who were integrated into T1 classrooms during the 2.25 hours per week of collaborative lessons but received no additional materials, parental training, or support. The control group received no inclusive SLP support or interventions, parental training, or materials. To provide the 2.25 hours per week of intervention to T1 students, the SLPs participated in a five-hour professional development course with the teachers and attended weekly planning meetings. Sixteen SLPs collaborated with classroom teachers to deliver instruction to students in T1 and T2, targeting oral language development, vocabulary acquisition, and syntactic and semantic skills during the classroom-based intervention. Teachers and SLPs administered a pretest at the beginning of the school year and a posttest at the end, assessing all students' listening, writing, speaking, and reading skills.

The researchers analyzed pre-and post-test scores using an analysis of variance (ANOVA) and conducted post hoc testing with a Tukey-B test to account for unequal sample sizes (Farber & Klein, 1999). The overall results showed significant gains in listening ( $p < .001$ ), writing ( $p < .05$ ), and total scores ( $p < .001$ ), with reading approaching statistical significance ( $p = .068$ ). More specifically, students in T1 and T2 scored higher on all five subtests than the control group; the 46 students in T2 performed significantly better than students in the control group on the listening and writing subtests ( $p < .05$ ), and students in the collaborative T1 classroom scored significantly better than the control group on the listening subtest ( $p < .001$ ).

Overall, more than 60% of T1 students improved from an initial score of below average to a final score of above average. In comparison, only 29% of students in T2 and 22% in the control group showed similar improvement. Notably, no T1 students experienced a decline in performance, while 17% of T2 students and 13% of control group students demonstrated decreased scores. Together, the results show that the T1 collaborative model was an effective model, showing student improvement, especially in listening and writing (Farber & Klein, 1999).

Similarly, Throneburg et al. (2000) conducted an experimental study examining the effectiveness of three service delivery models, collaborative, classroom-based, and traditional pull-out, on vocabulary acquisition among 177 kindergarten through third-grade students from two schools. The study ran for 12 weeks, during which the students learned five vocabulary words per week. The researcher aimed to examine the effectiveness of the three service delivery models on vocabulary development for students who qualified for speech and language services, as well as their peers who were not on an IEP.

In the collaborative classrooms, a teacher, an SLP, and two SLP graduate students worked together to plan and deliver instruction. Before the intervention, the team met to design language activities for the 12 weeks collaboratively and continued with weekly 40-minute planning sessions during the intervention (Throneburg et al, 2000). Each week, they introduced five vocabulary words through a three-part instructional sequence: an introductory activity, reinforcement during curriculum instruction, and a hands-on activity. All four adults co-taught these lessons, and the classroom teacher reinforced the vocabulary throughout the week. Students with speech and language IEPs received 15 minutes per week of pull-out services where they worked on targeted goals as well as vocabulary concepts. Students in the collaborative classrooms received their pull-out time with other collaborative classroom students. In the

classroom-based model, students received 40 minutes of weekly instruction from the SLP and two graduate students without teacher involvement in planning or delivery. Likewise, the students on IEPs received 15 minutes per week of pull-out therapy with other students in the classroom-based setting. Students in the traditional setting received only 50 minutes per week of pull-out speech and language services, during which they worked on the vocabulary concepts along with their other targeted goals. Students without IEPs in this setting learned vocabulary solely through their classroom teacher's curriculum instruction. The post-test assessed knowledge of 20 words drawn from the 60 taught during the study. The test asked students to define words, use them in sentences, and identify meanings from two choices. The interjudge and intrajudge reliability reached .99, based on scoring by two professors and seven graduate students. Throneburg et al. (2000) analyzed the data using ANOVA followed by Duncan post hoc testing.

Among the students on IEPs, the ANOVA revealed that there were no significant differences between the three groups on the pretest ( $p=.49$ ) but found significant test gains between all three service delivery groups on the post-test ( $p=.045$ ) (Throneburg et al, 2000). The Duncan post hoc analyses revealed that students in the collaborative setting test's gains were significantly higher than those in the other two settings. There was no significant difference between the students in the classroom-based setting and traditional pull-out settings, as the collaborative group improved with a mean increase of 20, while the classroom-based group had an increase of 12, and the pull-out group improved by a mean of 13. Students in the collaborative setting moved from using a word in a sentence with approximately half of the 20 words to using approximately half of the words in a sentence and giving the definition of the other half. They also improved their ability to use vocabulary words by an entire point. Students in the classroom-

based setting and traditional classroom went from using approximately half the words in a sentence to using most of the words in a sentence. They also improved their ability to use vocabulary words by half a point. Students without IEPs showed similar trends. Those in the collaborative and classroom-based settings outperformed students in the traditional model, with statistically significant post-test gains noted in their Duncan post hoc analyses. These students also progressed from sentence-level usage to a combination of sentence-level usage and correct definitions. Meanwhile, students in the traditional model showed the least growth and remained at sentence-level vocabulary usage only. Overall, these findings show the effectiveness of collaborative and classroom-based service delivery when working on vocabulary skills over the traditional pull-out model (Throneburg et al, 2000).

Mitchell et al. (2022) completed a quasi-experimental study that examined the impact of a collaborative vocabulary intervention in two third-grade classrooms from two different schools. The researchers implemented a Vocabulary Intervention Approach (VST) protocol that targeted three areas of vocabulary knowledge: synonyms, words in context, and non-examples. The four teachers and two SLPs planned and scaffolded 13 lessons over seven weeks. The purpose of the study was to investigate whether vocabulary instruction delivered collaboratively by a teacher and an SLP would yield greater student gains compared to instruction delivered by a teacher alone. Their research question focused on comparing student performance on researcher-developed vocabulary tasks across within-group, between-group, and interaction (time and group) factors.

In each school, one classroom served as the collaborative intervention group, while the other served as a comparison group without SLP involvement (Mitchell et al., 2022). The students were administered a pretest before the seven weeks of intervention and a post-test

following. While preparing for the intervention, all teachers and SLPs completed professional learning modules and rated the vocabulary words for student familiarity and instructional value. During the intervention, all students received a 60-minute per week lesson to introduce and review the vocabulary words. During the first six weeks, students learned six new words a week, followed by three words during the seventh week. During the seven weeks, there were two introduction days, and all other instructions were review days where students received at least five encounters with all six words. Instructional time and lesson pacing were consistent across all four classrooms. However, in the collaborative classrooms, review sessions included enhanced support such as vocabulary reference sheets with talking points, prompt examples, and non-examples. Lessons were co-delivered, with the SLP scaffolding key parts, modeling vocabulary use through role-play with the teacher and posing strategic questions to deepen student understanding. The collaborative teams also met for 30 minutes weekly to reflect on student performance, address behavioral challenges, and plan upcoming instruction. Students completed both a pretest and a posttest using the exact vocabulary words presented in a different order. The assessment included 19 synonym items, 20 fill-in-the-blank contextual items, and 18 non-example tasks using previously taught words. All test items were read aloud by the assessor, and the assessor gave no accommodations. Interrater reliability was exceptionally high, ranging from 99.8% to 100%.

Mitchell et al. (2022) used ANOVA for vocabulary score analysis. The author used Cohen's  $f$  scale for effect sizes: small ( $f = .1$ ), medium ( $f = .25$ ), and large ( $f = .4$ ). The effect sizes for within-group gains in both synonyms and non-examples were large ( $f = 1.36$ ); however, no significant between-group differences were observed for those two areas ( $p = .284$ ), suggesting that all students improved similarly regardless of group. In contrast, the collaborative

group significantly outperformed the comparison group in tasks requiring the application of words in context ( $p = .043$ ).

*Synthesis of Research Examining Effective Service Delivery.* The three articles support the effectiveness of classroom-based service delivery models, particularly when SLPs collaborate with general education teachers. Across all three studies, SLPs and teachers stated that shared planning time between SLPs and teachers was a vital element linked to student success (Farber & Klein, 1999; Mitchell et al., 2022; Throneburg et al., 2000). In all three studies, professionals met regularly, ranging from 30 minutes to 40 minutes weekly, to align goals, design lessons, and monitor student progress. Additionally, Mitchell et al. (2022) stated that administrative support was a key component of their success. Collaborative planning, although at times a challenging aspect to manage, allowed students to receive meaningful intervention with language targets that were embedded in the classroom curriculum (Throneburg et al., 2000). Another consistent finding was the importance of co-teaching and integration of the SLP into the classroom (Farber & Klein, 1999; Mitchell et al., 2022; Throneburg et al., 2000). In these effective models, SLPs played an active role during classroom instruction by modeling strategies, scaffolding vocabulary, and reinforcing key concepts through role-play, questioning, and interactive activities (Mitchell et al., 2022; Throneburg et al., 2000). SLPs added instruction on syntax, nuances of word meaning, and metalinguistic awareness, which led to deeper learning in the collaborative setting (Mitchell et al., 2022). This added language expertise used across academic contexts resulted in greater gains in expressive language, vocabulary acquisition, and oral language development for all students. In Farber and Klein (1999), Mitchell et al. (2022), and Throneburg et al. (2000), students in collaborative classrooms consistently outperformed peers in traditional or less-integrated models. Gains were particularly pronounced in vocabulary

usage and contextual application (Mitchell et al., 2022), with collaborative settings yielding the highest test score improvements for both students with and without IEPs (Throneburg et al., 2000). Together, these studies show the effectiveness of classroom-based service delivery when SLPs and teachers collaborate through shared planning and instruction. This approach not only supports students with speech and language needs but also benefits their non-disabled peers as well through the use of an inclusive learning environment (Farber & Klein, 1999; Mitchell et al., 2022; Throneburg et al., 2000). The evidence-based models used, such as language intervention techniques and classroom-based models, demonstrate the benefits of classroom-based service delivery in schools. Only three studies met the inclusion criteria for this Capstone, and there is a substantial lack of research addressing the currently reviewed language intervention techniques and classroom-based models, as well as other evidence-based models, such as phonological awareness training and narrative-based language intervention. This gap in research identifies the critical need for further investigation into evidence-based models for classroom-based service delivery.

### **Classroom-Based Service Delivery Model Barriers**

The following 14 articles contain research showing the persistent barriers to implementing classroom-based therapy and will provide answers to research question two (Armstrong et al., 2023; Brandel, 2020; Brandel & Frome Loeb, 201; Brimo & Huffman, 2023; Carlin, 2022; Evans et al., 2025; Green et al., 2019; Heilman & Bertone, 2021; Heilman et al., 2024; Koutsoftas et al., 2018; Pfeiffer et al., 2019; Pfeiffer et al., 2025; Poll & Hoffman, 2024; Ritzman et al., 2006). The investigation will show that the barriers include the lack of organizational infrastructure (scheduling and staffing), the need for stronger administrative support, and a lack of training for collaboration and classroom-based service delivery within

schools. Further investigation shows that a consistent theme across the research is that many SLPs still feel unprepared to navigate the complexities of classroom collaboration, even when they receive some support with scheduling, administrative structures, and training. These barriers also impact administrators, teachers, and SLPs as they clarify their roles, responsibilities, and expectations, and they hinder the professional teams from moving forward with interprofessional collaboration. This investigation will show how these barriers have a significant impact on classroom-based language therapy and contribute to the continued use of the pull-out model, limiting SLPs' ability to provide FAPE or services in the LRE.

### ***Organizational and Administrative Challenges***

The following section includes three surveys (Pfeiffer et al., 2019; Carlin, 2022; Heilman et al., 2024) and a 2025 systematic literature review (Evans et al., 2025). These studies highlight how inadequate organizational infrastructure and limited administrative support hinder SLPs' use of classroom-based services and interprofessional collaboration. They also identify specific actions administrators can take to help SLPs implement more varied service delivery models in school settings.

Pfeiffer et al. (2019) completed a quantitative study by surveying 474 SLPs to examine how factors such as caseload size, years of experience, and prior training in collaboration predicted their use of interprofessional practices (IPP) in schools and the barriers they encountered. The 28-item survey included SLPs from 49 states, with over 53% reporting more than 10 years of experience, 67% working in urban or suburban settings, and more than 73% serving in elementary schools. The researchers aimed to answer three primary research questions: (1) To what extent do factors such as caseload size, years of experience, and prior training in collaboration predict SLP engagement in multidisciplinary, interdisciplinary, and

interprofessional behaviors relative to special education initial evaluations? (2) To what extent do factors such as caseload size, years of experience, and prior training in collaboration with other professionals predict SLP engagement in multidisciplinary, interdisciplinary, and interprofessional behaviors relative to intervention? (3) What are the barriers to engagement in collaboration by school-based SLPs?

Pfeiffer et al. (2019) distributed their national survey through social media, email, and ASHA Special Interest Groups, allowing participants more than one month to complete it. To address the limitations of self-reporting, the authors used anchored vignettes representing three models of collaboration: *the multidisciplinary approach* (recognizing the value of other disciplines' contributions), *the interdisciplinary approach* (sharing responsibility for services among disciplines), and *the interprofessional approach* (team members teaching, learning, and working across disciplines). Participants selected one of these approaches (or "other") in response to questions about the IEP process, including initial evaluation, eligibility, and implementation. The survey also included multiple-choice questions regarding prior training in collaboration and each participant's caseload size. The authors analyzed data for the first two research questions using hierarchical generalized linear modeling (HGLM), incorporating predictors such as whether the SLP had received training in collaboration and whether the participant worked with an elementary-age or younger caseload.

The results from *question one* showed that SLPs who received training in collaboration and worked primarily with elementary-aged or younger students were more likely to engage in interprofessional behaviors when determining the need for an initial evaluation compared to those without training or those working with older students (Pfeiffer et al, 2019). When completing initial evaluations, the majority of SLPs (64%) reported using an interdisciplinary

approach, followed by 29% using a multidisciplinary approach, and only 8% using IPP. However, those who had received collaboration training were significantly more likely to engage in interprofessional behaviors during the evaluation process. When conducting initial eligibility meetings, SLPs who received training were more likely to engage in interprofessional behaviors during initial eligibility meetings rather than relying solely on multidisciplinary approaches. In contrast, SLPs with less experience, specifically those in their first year, those with 1–4 years, or those with 10–14 years of experience, were more likely to demonstrate multidisciplinary behaviors compared to their more experienced counterparts with 20 or more years of experience. Notably, SLPs with 1–4 years of experience also showed a greater tendency to use interdisciplinary practices. Additionally, SLPs managing caseloads of 40–59 children were more likely to engage in interprofessional behaviors (Pfeiffer et al, 2019). During initial evaluations, SLPs most frequently collaborate with school psychologists (15%), special education teachers (15%), occupational therapists (14%), and classroom teachers (14%). The results from *question two* showed that when developing IEP intervention plans, 45% of SLPs reported engaging in interdisciplinary behaviors, 42% in multidisciplinary behaviors, and 13% in interprofessional behaviors. SLPs with caseloads of 20 students or fewer (compared to those with 60 or more) and those who received training in collaboration were more likely to engage in interprofessional practices rather than multidisciplinary ones. However, collaboration training did not significantly influence the shift from interdisciplinary to interprofessional behavior during IEP development. During IEP implementation, 51% of SLPs reported using an interdisciplinary approach, 35% a multidisciplinary one, and 14% used an interprofessional model. SLPs who received collaboration training and those serving elementary-age or younger caseloads (as opposed to middle or high school–age groups) were more likely to engage in interprofessional behavior. In

contrast, SLPs with 5–9 years of experience (compared to 20 or more years) tended to use interdisciplinary rather than interprofessional practices. During intervention, SLPs most frequently collaborated with special educators (22%), followed by classroom teachers (18%) and occupational therapists (16%). In their answers to *question three*, school-based SLPs identified several key barriers to engaging in collaborative practices. Nearly half (48%) cited time constraints as the primary obstacle, followed by resistance from other professionals (23%), lack of administrative support (11%), including a lack of prioritization of teamwork (10%), insufficient training to work collaboratively (5%), and resistance from other SLPs in the workplace (2%). To increase engagement in collaboration, 51% of participants indicated that a smaller caseload would be most beneficial. Additional supports included greater collaboration from professionals in other disciplines (23%) and increased administrative support (9%) (Pfeiffer et al., 2019).

Carlin's (2022) quantitative study examined the disconnect between SLPs and their administration by comparing elementary school-based principals' and SLPs' perceptions of integrated classroom-based services (ICBS). Carlin (2022) surveyed 1022 SLPs and principals across Ohio to examine discrepancies in perceptions of classroom-based services. Of those professionals, 25% of the SLPs and 5% of the principals received training in ICBS in graduate school, and another 77% of SLPs and 25% of principals received training after employment. When asked about their ICBS experiences, 67% of SLPs and 37% of principals stated they had good experiences, versus 30% of SLPs and 62% of principals who had no experience at all. The study aimed to: (1) investigate elementary principals' and SLPs' perceptions of ICBS in the public school setting and (2) compare perception data in three areas: (a) effectiveness and specific benefits of ICBS, (b) impact of the SLP–teacher relationship on the successful

implementation of ICBS, and (c) the need for administrative support with time management and school resources.

To complete the study, Carlin (2022) employed a stratified random sampling method based on geographic and economic typologies to select participants, using publicly available email addresses from the Ohio Department of Education. The survey, administered via SurveyMonkey, included 17 perception statements rated on a 5-point Likert scale. Before distribution, two principals and two SLPs reviewed the survey draft, yielding an interrater agreement of .88 for relevance and representativeness and a content validity index of .85. Participants were given over four weeks to complete the survey. The survey achieved a 29% response rate, with adequate internal reliability and strong test-retest reliability based on responses from 17 SLPs and 10 teachers. Although researchers conducted the study in 2009, minimal change in service delivery trends over the past 14 years supports the continued relevance of its findings. Data were analyzed using frequency counts and chi-square tests of homogeneity to compare SLP and principal responses. The researchers separated responses into ‘agree’ and ‘disagree’ categories to further clarify results. The authors did not report any triangulation or additional strategies for ensuring credibility and trustworthiness beyond the noted data collection and analysis procedures.

Carlin’s (2022) findings focused on the perceptions of the effectiveness and benefits of ICBS for students on SLP caseloads. Both SLPs and principals generally agreed that ICBS supported language goal targeting, facilitated the carryover of communication targets into the classroom, encouraged peer learning, and reinforced target behaviors. However, significant differences also emerged. For example, only 21% of SLPs felt ICBS was effective for targeting speech sound errors, compared to 47% of principals, with 41% of SLPs actively disagreeing ( $p =$

.000). Discrepancies also appeared in perceptions of behavior management and data collection; 46% of SLPs remained neutral on classroom behavior being a non-issue, while 40% of principals agreed it was not problematic ( $p = .000$ ). Similarly, only 34% of SLPs believed ICBS facilitated data collection, compared to 55% of principals ( $p = .000$ ). Notably, a substantial portion of both groups expressed neutrality on the effectiveness of ICBS and the ease of targeting goals.

Regarding the SLP-teacher relationship, both groups emphasized the importance of shared philosophies, mutual respect, and professional rapport; however, 30% of SLPs and 42% of principals were neutral about the necessity of shared teaching styles. On administrative support, both groups agreed that SLP-teacher planning time and scheduling support were essential. Yet, 86% of SLPs disagreed that finding time to consult with team members was easy, whereas only 57% of principals shared this view, with 25% believing it was not an issue ( $p = .000$ ).

Furthermore, 23% of SLPs strongly agreed that students should be grouped by grade-level classrooms, compared to just 3% of principals, with both groups showing some neutrality on this point ( $p = .001$ ).

Heilman et al. (2024) conducted a deductive qualitative analysis exploring the practices of 12 Wisconsin-based SLPs who provided classroom-based services to more than 30% of their caseload. The state SLP administrator endorsed these SLPs for their inclusive practices, and each had three or more years of experience delivering classroom-based services. The study focused on three key areas: assessment practices, aligning IEP goals with the curriculum, and student placement and integration in the general education classroom. The purpose of the research was to demonstrate how inclusive service delivery models can assist SLPs with the development of educationally relevant IEPs.

Interviews were conducted via Zoom using open-ended questions and were transcribed by graduate students, with spot checks by the lead author to ensure accuracy (Heilman et al., 2024). The researchers employed a top-down deductive coding approach to analyze the transcripts, focusing on three predetermined categories: (1) assessing present levels of academic and functional performance, (2) determining the impact of disability on academic and functional performance, and (3) aligning services to student needs. The first author developed a coding scheme, and the initial transcript was coded collaboratively by the first author and two graduate students, reaching a 94% agreement rate. The authors resolved discrepancies through discussion. The graduate students coded the remaining transcripts, and the first author extracted relevant quotes to support each theme (Heilman et al., 2024).

Findings related to the assessment of present levels of academic and functional performance revealed that SLPs contribute significant value to all educational teams through their expertise in communication and language (Heilman et al., 2024). Although the curriculum is not traditionally an area of strength for many SLPs, participants reported strategies such as focusing on essential academic elements, using grade-level standards, and consulting curriculum rubrics or organizers. These tools enabled them to craft meaningful goals that enhance student success in the classroom. When asked about the effects of the disability on academic achievement and functional performance, SLPs emphasized the importance of identifying how communication needs influence students' daily participation and achievement in the classroom. The SLPs also noted that classroom-based settings offered greater opportunities to address social-pragmatic language skills within students' natural environments. Lastly, Heilman et al. (2024) looked at how SLPs align services to meet student needs. The responses indicated that classroom-based services were especially well-suited for students with language goals. These

settings also provided practical contexts for practicing and generalizing articulation and fluency skills. The SLPs reported that many of their colleagues continue to work in isolation and advocated for interprofessional collaboration to better support student outcomes. They stressed that collaborative partnerships with both general education and special education are vital to allow all students, not just those on IEPs, to benefit from the specialized SLP service. However, the SLPs acknowledged that successful implementation of classroom-based services requires administrative support, particularly in getting buy-in and shifting mindsets. Assistance and support from the district level to the school level are needed to facilitate systemic change (Heilman et al., 2024).

Evans et al. (2025) reviewed 26 articles in their systematic review of the literature. The review synthesized existing empirical evidence on collaborative perceptions and experiences in research in which SLPs were a part. This Capstone reviews four of the articles used in this study. Across all 26 studies, the most consistently reported demographic characteristics were participants' years of experience and geographic location. The research questions were as follows: (1) How are researchers investigating school-based SLPs' collaborative perceptions and experiences (e.g., design, participants, purpose, definition of collaboration, targeted collaborative activity)? And (2) How do school-based SLPs describe their perceptions and experiences related to collaboration in U.S. K–12 schools?

To narrow down from 296 non-duplicate articles, there was a dismissal of articles based on critical inclusion and exclusion criteria, and 26 studies ultimately met the inclusion criteria (Evans et al., 2025). To ensure trustworthiness, the researchers followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, used multiple databases, screened articles at both abstract and full-text levels, and conducted a progeny and

follow-up search to maximize comprehensiveness. The first author extracted key information from each included study, while the second author reviewed 20% of the data for accuracy, achieving 93% agreement. Disagreements were resolved through discussion.

The findings of Evans et al.'s (2025) systematic review revealed *six key areas* related to collaboration involving SLPs, but only five are relevant to this paper, as the excluded area discussed hearing loss and traumatic brain injury. *First*, studies that explored collaborative models, activities, and definitions varied in clarity. Two studies clearly defined collaboration while examining SLPs' perspectives, whereas two others compared SLPs with other professionals but lacked explicit definitions. One study explored how SLPs view paraeducators as part of their collaborative team. In the *second area*, several studies examined collaborative interventions involving SLPs, including their roles in teletherapy, initial evaluations, classroom-based services, and multi-tiered systems of support (MTSS), including response to intervention (RTI). The *third area* was not relevant to this paper. In the *fourth area*, participants generally perceived collaboration positively, citing benefits such as more cohesive practice and increased appreciation for colleagues. SLPs expressed support for inclusion models, though perspectives varied across disciplines. For instance, teachers reported more favorable collaboration experiences than SLPs, while principals and SLPs aligned on expectations but differed on service delivery practices. *Fifth*, while SLPs reported engaging in collaboration, their actual involvement often consisted of indirect methods such as email or meetings, highlighting a disconnect between perception and practice. The quality and frequency of collaboration also varied depending on the professional involved, with SLPs collaborating more frequently with occupational therapists and special education teachers than with general education teachers. Finally, the *sixth* finding showed that several facilitators and barriers influenced collaborative efforts. Organizational factors such

as staffing, administrative support, caseload size, and scheduling constraints played a significant role. Additional barriers included a lack of co-planning time, insufficient training, and interpersonal dynamics related to role clarity, professional attitudes, and conflict. It is worth noting that the reviewed studies did not conduct in-depth analyses of demographic factors, limiting conclusions regarding the influence of socioeconomic status, population characteristics, or geographic location on collaboration outcomes (Evans et al., 2025).

*Synthesis of Organizational and Administrative Challenges.* Across the four studies, findings consistently emphasized the critical influence of organizational infrastructure, professional training, and administrative support on SLPs' use of collaboration and classroom-based services. Pfeiffer et al. (2019) found low engagement in SLPs' use of IPP. Three factors shaped participation: SLPs who received collaboration training were more likely to engage in IPP than those without such training; early-career SLPs were less likely to engage in IPP compared to more experienced colleagues; and SLPs working in secondary schools were less likely to engage in IPP than those working in elementary settings. Barriers, including time constraints, scheduling challenges, resistance from other professionals, and a lack of administrative support, also affected collaboration (Pfeiffer et al., 2019). Carlin (2022) revealed that while principals and SLPs agreed on the value of ICBS, their views differed on logistical practical aspects like co-planning time and caseload grouping to improve efficiency, highlighting a gap between perception and practice. Heilman et al. (2024) emphasized that although classroom-based services support meaningful IEP development and inclusive practices in the LRE, organizational and administrative barriers, as well as collaborative relationships and shared responsibilities among educators, often limit feasibility. Similarly, Evans et al. (2025) reported that SLPs most often collaborated through indirect means rather than through shared instruction

or co-teaching and that logistical issues, such as scheduling, unclear roles, scheduling constraints, and lack of planning time, continued to impact the SLPs' use of classroom-based models. Together, these studies suggest that SLPs are more likely to use a classroom-based service delivery model in their practice when they receive administrative support that encourages interprofessional practice, including assistance with planning, scheduling, and classroom logistics.

### ***Factors Influencing Service Delivery Choice***

School-based SLPs prioritize addressing the needs and goals of their students. The following three articles examine factors that influence an SLP's decision to use classroom-based service delivery models and the factors that shape their choice in service delivery (Armstrong et al., 2023; Brandel, 2020; Brandel & Frome Loeb, 2011). While organizational and administrative structures within schools play a central role, more specific factors, such as caseload size, student disability level, and clarity of professional roles and responsibilities, also significantly impact how services are delivered.

**Caseloads as a Barrier to Collaboration.** Brandel and Frome Loeb (2011) conducted a quantitative, non-experimental survey involving 1,897 school-based SLPs from all 50 states and the District of Columbia. The participants had an average of 15 years of professional experience. Over 75% of respondents worked in urban or suburban settings, and more than 92% provided individual services outside of the classroom. Additionally, 87% reported delivering group services outside the classroom. The average caseload was 50.72 students, and over 64% of respondents worked in elementary schools. Notably, 83% of the SLPs indicated they received administrative support to provide services at the intensity needed to help students meet their goals and objectives. The researchers aimed to examine how student, SLP, and workplace

characteristics influence SLPs' recommendations for program intensity and service delivery models. Brandel and Frome Loeb (2011) focused on four primary research questions: (1) What are the dominant factors that influence SLPs' recommendations to their IEP teams regarding their students' program intensity and service delivery models for intervention? (2) What factors within the student domain (i.e., severity, grade level, and disability) of the school-based intervention decision-making (SIDM) model are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload? (3) What factors within the SLP domain of the SIDM model are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload? and (4) What factors within the workplace domain of the SIDM model are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload?

Brandel and Frome Loeb (2011) achieved a 95% confidence level with a sample size exceeding 1,048 complete responses. SLPs had three months to complete the initial survey. Following this, 50 participants from the original group received a follow-up survey asking for their perspectives on the observed lack of variability in program intensity and service models. Only 20 SLPs completed the follow-up. The researchers analyzed data using descriptive statistics and parametric tests. They used SPSS Version 14.0 to analyze data for research questions 1 and 2, while they employed multinomial logistic regression to address questions 3 and 4.

Brandel and Frome Loeb's (2011) findings revealed that student-related factors, particularly the nature and severity of the communication disorder, the student's needs relative to the general education curriculum, and the student's strengths and emerging abilities, had the most decisive influence on SLPs' recommendations. For instance, SLPs typically provided

speech-language services two to three times per week for students with moderate to severe disabilities. In contrast, students with mild disabilities generally received services once per week, particularly in elementary settings. Regarding service delivery models, SLPs most frequently provided individual sessions outside the classroom for students with articulation disorders or autism. They used pull-out group services for students with other disabilities. Responses related to SLP, and workplace domains (research questions 3 and 4) showed slight variation. SLPs reported that factors such as coworker relationships, administrative support, or team input had minimal impact on their service delivery decisions. However, caseload size emerged as the most influential workplace factor. As adjusted caseload size increased, students were more likely to receive services for shorter durations. The researchers also explored whether the SLP's year of graduation and clinical training influenced service recommendations. They found that recent graduates and experienced professionals were more likely to provide services to students with moderate to severe disabilities two to three times per week for 20–30 minutes, versus one time per week. They also found that those who had shared teaching experiences during graduate school in middle school settings were six times more likely to provide services in resource rooms. Additionally, SLPs who graduated more recently were more likely to serve severe kindergarten students in pull-out group sessions. Overall, this study showed that student factors, specifically the severity of disability, shape SLPs' service delivery decisions, but caseload size stood out as a workplace variable that affected an SLP's choice of duration and intensity of services.

Brandel (2020) conducted a follow-up quantitative, non-experimental study using a 28-question survey to assess whether factors influencing the location and frequency of services for students with language disorders had changed since the 2008 survey. The study also explored

whether SLPs differentiated their decisions based on the severity of the disorder. Additionally, the author examined how the year of graduation, prior classroom-based training, and caseload size influenced service location decisions. The survey included responses from 424 to 439 school-based SLPs across 39 states. The sample group of SLPs represented all four regions of the United States, with over 46% of participants working in rural schools. The average caseload size was 43.8 students, ranging from 10 to 96 for full-time SLPs. More than 66% of respondents reported using an interdisciplinary teaming model, and 44% indicated they made decisions with team input, compared to 37% who made decisions independently. Brandel (2020) addressed two research questions: (1) Have factors related to the student, workload, or SLP changed in the past 9 years relative to where and for how long services are provided for students with language disorders? and (2) Are the factors that impact SLPs different depending on the amount of differentiation reported in where and how long services are provided for students with mild, moderate, and severe language disorders?

Brandel (2020) distributed the survey via the Qualtrics platform and promoted it on state association websites and ASHA Special Interest Groups. The survey remained open for four weeks. A new key variable in this study examined how SLPs made decisions about the time and place of services across three severity levels: mild, moderate, and severe. The study categorized responses into three groups: (a) "all the same" for SLPs who made the same decision across all severity levels, (b) "two different decisions" for those who made two distinct choices, and (c) "three different decisions" for those who made unique decisions for each severity level. This variable included only SLPs who responded to all three severity levels. The author then applied descriptive statistics to analyze where and how long SLPs typically provided services and how much they differentiated those services by severity for students with language disorders. Brandel

(2020) employed logistic regression to identify the factors influencing decisions related to service time and place and to determine whether these factors affected how many different decisions an SLP made.

The organization of Brandel's (2020) results is in two primary areas: service location (inside vs. outside the classroom) and service time (frequency and duration), and each examines their results across students with mild, moderate, and severe language disorders. Overall, the results indicated that SLPs primarily based their service decisions on the severity of the disorder (Brandel, 2020). SLPs most often provided services in groups outside the classroom, once a week, for students with mild and moderate language disorders, and individually outside the classroom, two or three times per week, for students with severe language disorders. SLPs made the same location decision for all three severity levels 31% of the time, but they made the same decision for time only 17% of the time. Among those who chose the same time for all three severities, 21% cited the SLP's schedule as the most influential factor, and 14% cited the classroom schedule. Regarding service location, 18% of these SLPs identified the SLP's schedule and 17% the classroom schedule as their primary influence, as compared to the SLPs who had made two or three different decisions.

The authors examined variables such as teaming model, caseload size ( $p = .940$ ), year of graduation, and school setting for their relationship to service time, but they were not statistically significant ( $p = .0118$ ) (Brandel, 2020). However, likelihood ratio tests showed that the number of different time-related decisions made by SLPs was statistically significant across all severity levels. Specifically, the number of different decisions that SLPs made was equally significant for students with mild, moderate, and severe language disorders ( $p = .001$ ). Additional parameter estimates revealed that SLPs who chose the same service frequency across all severity levels

were nearly 25 times more likely to provide intervention twice per week for 20–30 minutes to students with mild language disorders, compared to once per week for the same duration. SLPs who made two different decisions regarding service frequency were almost five times more likely to select twice per week over once per week for students with mild disorders. In contrast, for students with moderate language disorders, SLPs who made consistent time-based decisions across severity levels were nine times more likely to provide services once per week rather than twice per week for 20–30 minutes. Brandel (2020) also found that several workplace factors influenced where services were provided, including teaming models, school demographics, caseload size, year of graduation, and decision-making approaches. As with time factors, the models across all three severity levels were significant for the location of services ( $p = .001$ ). Likelihood ratio tests showed that the number of different decisions SLPs made significantly affected service location for students with mild and severe language disorders. Parameter estimates revealed that SLPs who had made the same decision or two different decisions were less likely to provide services in the classroom as compared to those who had made three different decisions for students with mild language disorders. For students with severe language disorders, SLPs who made the same decision across severities were more likely to deliver services in group settings outside the classroom.

Caseload size also significantly affected service location for students with moderate language disorders ( $p = .002$ ) (Brandel, 2020). As caseload size increased by one student above the mean of 44, services were 0.968 times less likely to be delivered individually outside the classroom (versus in groups). Similarly, for students with severe disorders, the odds of receiving services in groups outside the classroom, as opposed to within the regular education setting, decreased by a factor of 0.955 for each additional student on the SLP's caseload (Brandel, 2020).

The author further examined whether workload factors (e.g., caseload size and teaming model) influenced how SLPs differentiated their service decisions. She found these factors did not significantly impact decision-making for the time or place of services.

While not focused primarily on caseload, Armstrong et al. (2023) did a mixed-methods systematic literature review study of 18 articles that included Interprofessional Practice (IPP) experiences between teachers and SLPs, finding factors that impact the collaborative nature of those experiences. The systematic review included 61% of studies done in the United States, and 89% included SLPs as participants. All studies focused on primary educational settings. Their purpose was to synthesize existing research on IPP experiences and perspectives between SLPs and classroom teachers (CTs). The authors selected studies that described the experiences of IPP between SLPs and CTs in school, were qualitative, quantitative, mixed methods, or a thesis publication, available in English, and published between 1994 and January 2023.

A member of the research team reviewed each study and recorded information about participant characteristics, study settings, research designs, data collection methods, countries of origin, and the workplace settings of SLPs (Armstrong et al., 2023). A second team member verified all extracted data for accuracy and completeness. The team resolved discrepancies and reached consensus through discussions. To ensure credibility and trustworthiness, Reviewer 1 initially screened 100% of studies, and Reviewer 2 screened 20%, resulting in a 95.8% interrater reliability. The reviewers resolved disagreements collaboratively with a third team member. Two reviewers independently assessed the full texts of the 133 remaining studies, achieving a 91.1% interrater reliability, with further disagreements resolved through team consensus. The team used thematic analysis to analyze the data. They adopted a data-based convergent synthesis design, converting quantitative data into qualitative codes to synthesize findings from both types of

studies. Two researchers initially coded the data inductively, and a third team member reviewed all codes for accuracy and validity. Through discussion, the team reached a consensus on coding. They organized 527 initial codes into 464 categories, which were then grouped into 20 sub-themes and ultimately into six overarching themes: (1) What are you bringing to the collaboration table? (2) putting the value in collaboration, (3) sharing is collaborating, (4) the nature of collaboration varies, (5) the educational context matters, and (6) influences on collaboration beyond professional control. A senior researcher reviewed all themes, subthemes, and categories to ensure the trustworthiness of the analysis.

The results for *theme one* showed that effective collaboration requires strong communication skills, as communication serves as the foundation for successful teamwork and builds a continued desire to collaborate (Armstrong et al., 2023). Conversely, insufficient or poor communication often presents a significant barrier to collaboration. In addition to communication, personal attributes such as strong interpersonal skills, flexibility, adaptability, diplomacy, cooperation, and openness are essential for effective collaboration. Team members also rely on critical professional skills, including time management and organization, to contribute meaningfully to collaborative efforts. In *theme two*, Armstrong et al. (2023) showed that putting value in collaboration requires SLPs and CTs to share responsibility for student outcomes and recognize the importance of working as a team. Valuing collaboration means acknowledging each other's contributions, maintaining shared attitudes, and building trust through ongoing relationship development. A lack of willingness to collaborate often stems from a failure to appreciate its value, which can negatively impact job satisfaction and collegiality. Some SLPs reported that teachers appeared reluctant to include them in the classroom, while others noted hesitation from professionals who were cautious about sharing their knowledge or

expertise. These challenges highlight the need for targeted training focused on building collaborative skills, as professional development in this area remains limited (Armstrong et al., 2023). *Theme three* showed that effective collaboration depends on shared understanding, mutual respect, and the willingness to exchange knowledge and expertise. A common barrier to collaboration is the lack of clarity around professional roles. CTs often do not fully understand the scope of SLPs' expertise, and SLPs may be unfamiliar with curriculum demands. However, shared knowledge among professionals, such as CTs' insights into general education and the SLPs' expertise in language acquisition, enhances their collective understanding and improves outcomes for students. Furthermore, collaborators benefit from aligning their fundamental principles and beliefs on learning to ensure more effective collaboration. *Theme four* noted that the nature of collaboration between SLPs and CTs varies significantly based on service delivery models, communication frequency, and mutual engagement. Often, SLPs function as providers of specialized strategies and techniques through a consultative model, and actual team teaching is rare. When this consultative support is absent, CTs may perceive collaboration negatively. In many cases, collaboration involves SLPs sharing information rather than co-developing instruction. Additionally, effective collaboration depends on regular, ongoing communication and meaningful feedback. SLPs may provide insights into student performance, but a lack of reciprocal feedback from CTs can hinder progress. The frequency and modality of collaboration sessions also varied across studies, further demonstrating the inconsistent implementation of collaborative practices in schools. In *theme five*, the authors described how the educational context plays a crucial role in shaping collaborative practices between SLPs and CTs. The physical presence of SLPs within the school setting improved collaboration by helping CTs better understand the SLP's role; however, limited SLP presence is often a barrier, reducing

consistency and continuity in support. Critical factors that impede collaboration efforts for both SLPs and CTs included large caseloads and time constraints. Specifically, many participants reported insufficient time to hold meaningful collaboration. Scheduling conflicts further hindered collaboration, including rigid or non-overlapping schedules, limited opportunities for shared planning, and CTs lacking adequate time in their schedules to engage in collaborative work. Finally, *theme six* gave insight into the fact that several external factors beyond professional control significantly influence collaboration between SLPs and CTs. Organizational functioning within school systems often presents logistical barriers that hinder SLPs' ability to collaborate effectively. In some cases, the involvement of multiple SLPs in a school created confusion, highlighting the need for more coordinated structures. Engaging school administration proved essential, as administrators play a critical role in facilitating collaboration by addressing scheduling challenges, allocating resources, and organizing staff to support collaborative efforts. Administrative support allows for SLPs and CTs to maintain their collaborative work within the school and work with parents to support student outcomes effectively (Armstrong et al., 2023).

***Synthesis of Influencing Factors.*** Across Armstrong et al. (2023), Brandel (2020), and Brandel and Frome Loeb (2011), the research noted several key factors that shape school-based SLPs' decisions regarding service delivery and collaboration. Brandel and Frome Loeb (2011) and Brandel (2020) found that caseload size plays a significant role in determining service location, with most services for students with language disorders, regardless of severity, delivered in group settings outside the classroom. Brandel (2020) also showed that classroom-based services were used most often with students with the least severe needs, suggesting that student needs are considered less critical than scheduling or administrative constraints. Armstrong et al. (2023) and Brandel (2020) found that many SLPs lack the interprofessional

skills needed to implement classroom-based models effectively. Armstrong et al. (2023) continued by identifying system factors needed for successful collaborative practices in schools, such as shared values of SLPs and teachers, training, and administrative support. Together, these studies emphasize that the school's logistical barriers and lack of interprofessional skills contribute to the limited use of classroom-based services.

### ***Training and the Bridge Gap***

The following seven studies focus on the gaps in training on classroom-based service delivery and how the presence or absence of training influences the service delivery model chosen by SLPs. The research investigates in-service/professional development (district and school-based) levels (Brimo & Huffman, 2023; Green et al., 2019; Poll & Hoffman, 2024; Ritzman et al., 2006) and the gaps in training at the preservice (university master's) level (Heilman & Bertone, 2021; Koutsoftas et al., 2018; Pfeiffer et al., 2025). It further examines why more adequate training is needed, the impact of inadequate preparation on SLPs' ability to implement classroom-based models effectively, and the need to address the underuse of classroom-based models within SLPs' service delivery approaches. These studies also explore how administrative support and other influencing factors shape SLPs' perceptions and experiences with implementing collaborative, classroom-based services.

**Importance of In-Service/Professional Development.** Ritzman et al. (2006) conducted an ethnographic study that revealed the gap between ideal classroom-based service delivery and its real-world implementation. The researchers used qualitative methods, including observations and interviews, to examine how a Midwestern-based middle school SLP applied collaborative and classroom-based practices. The purpose of the study was to explore how a school-based SLP

implemented a classroom-based service delivery model focused on collaboration within the general education setting.

Ritzman et al. (2006) collected observational data of the middle school SLP seven times over a period of four months. The interviews with the SLP, which included six open-ended questions, focused on the SLP's processes, perspectives, and techniques. To ensure the credibility and trustworthiness of the findings, the first two authors independently reviewed the interview transcripts and identified general meanings. Ritzman et al. (2006) segmented observational data into smaller units, coded at the paragraph or sentence level, and then reviewed collaboratively to reach a consensus. The researchers synthesized these data into a descriptive narrative and analyzed emerging themes from the coded transcripts and observations.

Ritzman et al. (2006) found *five key themes* that contributed to the SLP's effective service delivery. The *first theme* was the use of a variety of service delivery models, including collaboration, consultation, and limited pull-out services. The use of classroom-based models allowed the SLP to effectively utilize the curriculum and classroom environment when working with language learners. While she acknowledged that controlling classroom variables was more challenging than in pull-out sessions, she valued keeping students engaged in the curriculum and classroom routines. The *second theme* talked about how the SLP utilized curriculum-based instruction to focus on her student's individualized goals. She adapted her instruction to align with classroom lessons, often providing support (e.g., drawing illustrations or writing notes on the board) during instruction without interrupting the teacher. She primarily worked with students in general education settings, using the existing curriculum as a framework for intervention. The *third theme* described how scheduling and planning were essential but challenging aspects of the model. The SLP collaborated with administrators to group students

effectively and prioritized working with teachers with whom she had existing relationships. Although she aimed for weekly planning sessions with teachers, she identified planning and maintaining a focus on speech-language goals and objectives in the general education setting as ongoing challenges. The *fourth theme* centered on collaboration. The SLP discussed the importance of shared mutual respect and shared expertise, noting that successful collaboration required flexibility, open communication, and a willingness to listen to teachers regarding curriculum adaptations. Finally, the *fifth theme* focused on advocacy. The SLP conducted an in-service presentation to her school to explain the value of collaborative service delivery and regularly advocated for her role with teachers, administrators, and district personnel (Ritzman et al., 2006).

Green et al. (2019) conducted a mixed-methods study using a 50-item survey to investigate school-based SLPs' use and perceptions of inclusion-based service delivery. The study examined the factors that influence clinicians to rely on the pull-out model, which they used more than four times as often as classroom-based services. The researchers surveyed 344 SLPs across 11 states, with 76% of the SLPs coming from Texas. The survey addressed four research questions: (1) What does training in and implementation of inclusion services look like for the surveyed SLPs? (2) What are the surveyed school-based SLPs' perceptions with regard to both positive and potentially challenging aspects of the inclusion service delivery model? (3) Are use and perceptions of inclusion predicted by lack of training in an inclusion model, caseload size, teacher factors, and administrative support, or related to the school setting? (4) What are SLPs' most frequently reported open-ended responses to "things they like about the inclusion model," "challenges faced when providing inclusion services," and "the most important keys to success for implementing classroom-based services"?

The participants in Green et al. (2019) completed the survey either in person at the Texas Speech-Language-Hearing Association conference or online via the ASHA Special Interest Group 16 website. The survey included multiple-choice, yes/no, agree/disagree, and open-ended questions. The researchers used descriptive statistics to analyze questions 1 and 2. Green et al. (2019) applied logistic regression and non-parametric chi-square analysis to address question 3, and they used content analysis to extract themes for question 4. The authors developed themes and subthemes collaboratively and achieved inter-rater reliability of 97% to 100% across the three researchers.

The results showed that 27% of participants had received no training in classroom-based service delivery (Green et al., 2019). Of those who received training, 29% did so during graduate school, 44% through their school district, and 68% at a professional conference. Regarding implementation, 65% of participants preferred using the pull-out model, while only 1–25% of students on their caseloads received classroom-based services. These services primarily targeted language and social-pragmatic goals. More than 60% of the surveyed SLPs perceived inclusion as ineffective for most of their caseloads. They cited limited planning time, fewer opportunities for repeated practice, and difficulties collecting data as primary concerns. When analyzing predictors of inclusion use and perceptions, the researchers found that administrative and classroom teacher support significantly predicted positive views and use of the inclusion model ( $p < .001$ ). Conversely, lack of teacher support and infrequent collaboration ( $p < .001$ ), such as not holding weekly meetings ( $p = .02$ ), predicted negative perceptions. The authors also found that there was no significant difference between school settings and a positive view of the use or perception of the inclusion model (no reported score), but there was a significant relationship between the school setting and receiving teacher support, especially in the preschool setting ( $p =$

.001). A significantly higher proportion of elementary school SLPs believed classroom-based services were ineffective and perceived that teachers disliked the inclusion model ( $p = .001$ ). An SLP's lack of training did not significantly predict their positive or negative perceptions of inclusion (no score reported). Responses to open-ended questions revealed that many SLPs valued collaboration with teachers, the ability to work with students in natural environments, and opportunities to facilitate generalization and carryover of skills. However, they also identified substantial challenges, including limited time for planning and preparation, insufficient teacher collaboration, and classroom disruptions that interfered with effective service delivery (Green et al., 2019).

Brimo and Huffman (2023) conducted a mixed-methods survey with 87 SLPs and 77 teachers across 28 states, with 49% of participants residing in Texas. The survey aimed to compare SLPs' and teachers' perceptions of collaborative service delivery in their schools, including pull-out, consultation, push-in (individual or small group), and team teaching. The authors designed the survey to address five research questions: (1) Do SLPs report using collaborative service delivery models? (2) Do teachers report that SLPs are using collaborative service delivery models? (3) Is there a difference in how SLPs and teachers rate experiences with collaboration? (4) Is there a difference between SLPs' and teachers' identification of one another as collaborative partners? (5) Is there a difference in SLPs' and teachers' identification of barriers to collaboration?

Brimo and Huffman (2023) created the SLP survey to include eight demographic questions and four collaboration items, each introduced with definitions of the service delivery models. The teacher survey contained seven demographic questions related to education, employment, classroom type and size, and language proficiency, along with five collaboration

questions, and the surveys remained open for 14 weeks and were available on social media and an SLP/teacher listserv. The researchers analyzed responses to Research Questions 1 and 2 descriptively by calculating means and standard deviations. They used nonparametric chi-square analyses in Predictive Analytics Software for Windows (PASW) to evaluate Research Questions 3 and 4. They ensured that the data met all assumptions for chi-square testing. They tallied and categorized responses to questions about positive or negative collaborative experiences and about who typically initiated collaboration. The authors used Cramér's  $V$  to determine the strength of association between groups with the following indications of association: high  $>.5$ , moderate  $.3-.5$ , and low  $.1-.3$ . The researchers analyzed Question 5 qualitatively using a mixed-methods approach in PASW. They identified consistent themes, such as time constraints and district- or school-level barriers. After clarifying the themes, they reviewed each participant's response point by point and compared their coding until they reached 100% agreement.

The findings showed that the majority of SLPs reported using a combination of collaborative and noncollaborative service delivery models (SDMs), with 88% implementing pull-out services (Brimo & Huffman, 2023). Only 7% of SLPs used pull-out exclusively, while 11% reported not using it at all. Additionally, 9% employed all types of SDMs, 83% used consultation, 58% provided push-in group services, 44% offered push-in individual sessions, and 30% engaged in team teaching. Teachers' reports showed less frequent use of collaborative practices by SLPs. While 88% of teachers indicated that SLPs used noncollaborative SDMs, only 28% stated that SLPs relied exclusively on pull-out. In contrast, 62% of teachers observed a mix of collaborative and noncollaborative approaches, and 11% reported that SLPs used collaborative models only. Only 22% of teachers identified consultation as a collaborative practice in use. When comparing overall perceptions of collaborative experiences, teachers were significantly

more likely to report positive experiences than SLPs ( $p < .001$ ). Specifically, 96% of teachers and 67% of SLPs described collaboration positively. However, when asked about specific experiences with SLPs, the percentage of teachers reporting positive collaboration dropped from 69% to 57%, while 13% rated the experience as not positive. Significant differences also emerged in how SLPs and teachers perceived barriers to collaboration. A significant association existed between the SLP and teacher and lack of awareness of roles and responsibilities ( $p < .02$ ), as well as between the SLP and teacher and lack of training on collaboration ( $p < .05$ ). In both cases, SLPs were more likely to identify these issues as barriers, while teachers were less likely to do so. Quantitative analysis of open-ended responses revealed consistent concerns around time, district or school-related concerns, and willingness to collaborate. Both groups agreed that inadequate training and unclear professional roles could hinder effective collaboration (Brimo & Huffman, 2023).

Poll and Hoffman (2024) conducted a mixed-methods study, questioning preservice teachers and graduate SLP students, focusing on learning about the attitudes and perceptions of IPP while working with children who have language difficulties. The students answered 18 Likert scale questions and four open-ended questions both before and after the intervention. The teachers were second or third-year students taking teacher preparation courses, and the SLPs were first-year graduate students in a language disorders class. An average of 58% of the SLPs and 43% of teachers completed the pre- and post-surveys. To complete the interprofessional education (IPE) experience, students collaborated on creating a family engagement plan by creating goals and objectives, communicating with the family, and creating a home support plan as well as an assessment plan. The survey focused on four themes: participants' attitudes toward promoting language development in the classroom (three items), perceptions of collaboration

with other professionals (five items), views on the roles of teachers and SLPs (seven items), and self-perceived skills for working with children with communication impairments (three items).

Quantitative data were analyzed using rating scale interpretations from Shaughnessy and Sanger (2005) (Poll & Hoffman, 2024). Qualitative responses were analyzed using a content analysis approach. Triangulation ensured code integrity, with themes confirmed through repeated review and convergence of multiple perspectives. An independent observer further reviewed the data to establish consistency, and intercoder agreement across all qualitative questions on both surveys was 88%, falling within the acceptable range.

The quantitative findings revealed several important insights into participants' attitudes, perceptions, and skills regarding interprofessional collaboration and language promotion. In the area of promoting language in the classroom, both preservice teachers and SLPs agreed to address language goals in classroom settings, but SLPs expressed stronger agreement (Poll & Hoffman, 2024). However, the groups differed on the preferred delivery model; teachers agreed that one-on-one sessions with SLPs were best, whereas SLPs disagreed. These views remained the same following the interprofessional education (IPE) experience. Regarding interprofessional collaboration, both groups initially agreed that professionals should engage in each other's activities, with SLPs expressing stronger agreement. Participants were neutral on whether collaboration imposed additional work, but after the IPE experience, both groups showed stronger agreement that SLPs' participation in classroom activities was acceptable. In terms of professional roles, both groups agreed that teachers and SLPs should share responsibilities in implementing speech and language interventions, although SLPs more strongly believed in teachers' roles and demonstrated a greater understanding of teaching roles. Teachers remained neutral on whether SLPs held sole responsibility for remediating language difficulties, while

SLPs agreed. Following the IPE experience, both groups reported stronger agreement that professionals other than SLPs could support language goal implementation (Poll & Hoffman, 2024). Finally, participants initially agreed that they had the skills to identify speech and language goals, with SLPs expressing higher confidence in recognizing language difficulties and understanding typical development. Post-IPE survey results showed increased agreement that both groups could effectively identify language difficulties in classroom settings. The qualitative findings highlighted changes in participants' perspectives before and after the IPE experience. In response to how teachers and SLPs could work together to support children with disabilities, pre-IPE responses used collaboration to find effective techniques and create supportive environments. Post-IPE responses shifted toward integrating SLP strategies directly into classroom activities. Regarding barriers to effective collaboration, both pre- and post-survey responses identified caseload, communication challenges, and unclear role definitions, although the post-IPE responses showed a deeper awareness of these issues. When asked about the skills needed to collaborate with other professionals, participants initially focused on communication, teamwork, confidence, and persistence, while post-IPE responses reflected a stronger emphasis on developing skills specifically to support collaboration. Finally, in identifying what skills they could contribute to collaborative efforts, both groups expressed a willingness to learn in the pre-survey, with SLPs also noting their expertise in language development. After the IPE experience, participants articulated more concrete skills they could offer to foster collaboration. Teachers discussed increased flexibility and enthusiasm, while SLPs mentioned improved skills in assessment, identification, and intervention strategies for their students.

**Preservice and University Training.** The Koutsoftas et al. (2018) study is a program evaluation study using a mixed methods approach that implemented an effective training

program by forming a university–school partnership that trained three graduate students to deliver classroom-based services in an urban public-school setting. The graduate students worked with one certified SLP for 20 weeks over two semesters. The school indicated that it was interested in participating to help address language and literacy needs within the school. The researchers and the school identified possible obstacles and worked together to prioritize which goals to focus on. The research team had three goals for the partnership, which included augmenting speech and language services to students, training graduate students in assessment and school-based interventions, and increasing interest in working with urban public-school settings. The researchers aimed to answer three questions: (1) What was the frequency and type of training provided to stakeholders, and what was the quality of the training? (2) Were all associated parties properly informed of the program expectations and classroom-based intervention services? (3) What is the satisfaction level of the stakeholders and associated parties of the program?

To complete the evaluation, during the first two weeks, graduate students familiarized themselves with the school environment and the IEP process (Koutsoftas et al., 2018). The program then followed three consecutive six-week rotations. In the first rotation, one graduate student worked with the school-based SLP in a traditional clinical setting while the other two provided classroom-based interventions for students on the caseload. In the second and third rotations, all three students rotated roles, ensuring each gained experience in both traditional clinical practice and classroom-based services. The program divided classroom assignments based on the number of students receiving speech and language services. Classrooms with more students on the caseload received greater support. Graduate students in traditional clinical rotations followed an "observation to practice" model, beginning with session observation and

progressing to supervised therapy provision. In classroom-based roles, students implemented a variety of services designed to support IEP goals; these services supplemented, rather than replaced, those outlined in students' IEPs. At the participating elementary school, the SLP's caseload included 52 students in preschool through fifth grade, and most of their students qualified under the category of autism. These students received services in self-contained elementary and preschool classrooms, general education with related services, and inclusion settings. Koutsoftas et al. (2018) used structured interviews, teacher surveys, and student-level descriptive data to evaluate the classroom-based intervention program. Additional interviews with the stakeholders, graduate students, school staff, and administrators indicated that they implemented the pilot program well. Most participants felt they received sufficient training to understand and apply the collaborative intervention model. However, graduate students suggested extending the orientation period and adding applied behavior analysis (ABA) training. Many stakeholders recommended lengthening the rotation duration to improve consistency for both students and graduate clinicians. Researchers also deployed an anonymous Likert-type rating scale via electronic survey to 11 classroom teachers who hosted graduate students. These teachers, who had graduate students in their classrooms an average of 2.75 days per week, responded positively. They strongly agreed that graduate students did not disrupt instruction, negatively impact those students not receiving speech services, or interfere with classroom routines. Most said they would welcome the students back. Graduate students also collected student-level descriptive data using standardized forms for which they had received training. Across the program, students received an average of 18 days of traditional speech services and 25 days of classroom-based services. On average, students received 19 hours of speech-language

therapy in a separate location (approximately 2 hours per week) and 18 hours of classroom-based services (about 1.75 hours per week) (Koutsoftas et al., 2018).

The data supported the successful implementation of the pilot year of the university–district partnership, as guided by the logic model and program evaluation questions (Koutsoftas et al, 2018). Collaborative parts of the project, such as training and scheduled meetings, occurred with appropriate frequency and contributed to positive stakeholder engagement, as confirmed by program materials and stakeholder interviews that identified their quality and relevance.

However, the data also revealed concerns. Stakeholders across all data sources questioned the effectiveness of the 6-week staggered rotation schedule in meeting program goals. Graduate students, the elementary school SLP, and the adjunct clinical instructor expressed concerns about limited supervision during classroom-based interventions. They recommended increasing supervisory support to improve the quality and consistency of services.

Heilman and Bertone (2021) conducted a mixed-methods survey with 145 Wisconsin-based SLPs as participants. Over 53% of the SLPs worked in elementary schools, 71% worked in urban or suburban schools, and 79% had 10 or more years of experience. The 23-question survey used rank order and open-ended questions. The study aimed to identify needs in the areas of training and research to better support school-based SLPs. The authors aimed to answer questions in three specific areas: (1) to identify perceived preservice training needs for future school-based SLPs; (2) to identify perceived PD needs for SLPs working in the schools, both general needs and needs of SLPs transitioning into school-based practice; and (3) to identify gaps in research that support school-based practice.

The survey included background questions and six open-ended items focused on preservice training, professional development, and research needs (Heilman & Bertone, 2021).

Respondents reflected on what aspects of graduate school prepared them for school-based practice, identified areas needing more support, and shared suggestions for useful research topics (Heilman & Bertone, 2021). Additionally, the survey rated the importance of 13 broad topics for graduate training or continuing education, followed by more detailed rankings within 10 of those topics. The qualitative data analysis was conducted by two authors: one with extensive experience in qualitative methods, the other a practicing SLP serving on the administrative board for the Wisconsin Department of Public Instruction. Of the 725 total survey responses, 579 were unambiguous. After a point-by-point comparison, the coders achieved 93% agreement. They resolved any discrepancies through discussion. For the 145 ambiguous responses, the coders also reached a consensus through collaborative discussion. Using axial coding, the researchers identified common themes from the coded data. They confirmed that the findings aligned with professional practice and addressed relevant gaps in school-based speech-language pathology.

The findings identified *five themes* drawn from 14 generated codes reflecting gaps where school-based SLPs feel underprepared or in need of additional support (Heilman & Bertone, 2021). The *Specialty Areas theme* included needs related to diagnostic categories (autism, phonological disorders), communication modalities (AAC, sign language), age-specific support, and other specialized knowledge areas. The *Service Delivery theme* focused on essential clinical skills (assessment, intervention, progress monitoring), managing student behavior, stakeholder communication, and culturally responsive practices. The *Professional Responsibilities theme* captured competencies required for maintaining compliance and collaboration within school settings (case management, administrative tasks, interprofessional teamwork, and adapting clinical practices to school environments). The *Soft Skills theme* referred to interpersonal and professional qualities contributing to workplace success, while the *Adult Learning theme*

emphasized the need to improve how preservice training and professional development are delivered. Further findings revealed several perceived gaps in school-based SLP training and practice (Heilman & Bertone, 2021). When reflecting on preservice preparation, 43% of participants most frequently identified practicum and campus clinical experiences, especially school-based practicums, as essential. They appreciated training in language and phonology but felt underprepared for school settings due to coursework that emphasized theory and research over practical school-based applications. Respondents also noted that graduate programs should place greater emphasis on professional responsibilities, particularly IEP development. When reflecting on professional development for new school-based SLPs, participants expressed concern that new clinicians often lack readiness for the wide range of responsibilities expected in schools. The authors highlighted deficiencies in interprofessional practice skills, communication, collaboration, and growth mindset. Similarly, in identifying research gaps, respondents emphasized the need for more focus on service delivery and professional responsibilities, especially interprofessional collaboration. In a preferential ranking of key training and professional development topics, evidence-based interventions were rated significantly higher than all other items. Other priorities included descriptive, non-standardized assessment, progress monitoring, goal development, and IEP writing. Conversely, working on interprofessional teams, differential diagnosis, and reading disorders were rated as less important. These findings indicate a disconnect between the skills valued in practice and those emphasized in training and research.

Pfeiffer et al. (2025) completed a quantitative study with 167 school-based SLPs from throughout the United States. More than 70% of the participants had 10 or more years of experience as an SLP, and 97% identified as female. To be eligible, the participants had to work with students in kindergarten through fifth grade. The study aimed to assess SLPs' perceived

knowledge, training, support, and experiences related to collaborative language and literacy instruction and intervention with classroom teachers (Pfeiffer et al., 2025). The researchers addressed four questions: (1) What perceived knowledge do SLPs report having about collaborative language and literacy instruction? Is this perceived knowledge correlated with years of experience working as a school-based SLP, years of experience working in their current school, or self-reported frequency of providing collaborative language and literacy instruction with general education teachers? (2) What interprofessional education (IPE) training do SLPs report having related to collaborative language and literacy instruction? Does the timing of the training impact SLPs' self-efficacy for engaging in collaborative language and literacy instruction? (3) What are SLPs' perceptions of support from administrators and general education teachers for engaging in collaborative language and literacy instruction? (4) What are SLPs' experiences with providing collaborative language and literacy instruction with general education teachers?

The author sent out the survey via social media, e-mail, and through ASHA Special Interest Groups, and it was available to complete for nine weeks (Pfeiffer et al., 2025). It included 14 demographic questions and 32 items focused on collaboration, beginning with a screening question to confirm eligibility. The authors used the Theoretical Domains Framework of Behavior Change (TDF) to guide the format of the survey questions. The researchers analyzed survey data using Jamovi (2022) with principal component analysis (PCA) to group Likert-scale responses into four composite scores: perceived knowledge, context, personnel support, and personal experience. They used inferential statistics, including Pearson's and Spearman's correlations, independent-sample t-tests, and paired-samples t-tests, to examine relationships and compare group differences.

Pfeiffer et al. (2025) broke their findings into *four areas* related to their research questions. To answer *research question one*, they examined SLPs' "perceived knowledge" of key interprofessional behaviors necessary for collaborative language and literacy instruction. Scores on this composite measure ranged from 11 to 44, with participants averaging 30, suggesting general ambivalence about their knowledge in this area. Participants reported the highest confidence in developing IEPs with teachers and maintaining positive relationships with colleagues. However, they felt least knowledgeable about implementing collaborative language and literacy interventions in general education classrooms, as 43% described themselves as only slightly knowledgeable, and 12% reported no knowledge. Similarly, 39% said they were slightly skilled, and 25% felt they were not skilled in delivering collaborative interventions. When asked about confidence in providing collaborative instruction, 41% felt only slightly confident, and 27% felt not confident, as only half of the respondents reported having prior experience delivering collaborative language and literacy instruction. Regarding *research question two*, scores for the "context" component ranged from 8 to 32, with a median of 17, indicating they felt they had limited environmental support. Only 39% of participants reported receiving training in collaborative instruction. The majority of participants disagreed that they had access to resources (79%), a clear implementation plan (76%), or support from their state education agency (76%). Additionally, 80% disagreed that collaboration is simple to deliver (Pfeiffer et al., 2025). When asked about the timing of training, 16% received pre-service instruction, 18% from their employer, and 49% participated in voluntary continuing education. The remaining 17% selected "other." Statistical analysis found no significant difference in perceived knowledge based on whether training occurred pre-service or while working, suggesting that timing does not affect perceived knowledge ( $p = .662$ ). When combined with the information gathered from research

question one, the study suggested that training itself, regardless of when it occurs, proved more important to SLPs' confidence in their collaborative knowledge than years of experience or frequency of collaborative instruction (Pfeiffer et al., 2025). *Research question three*, the "personnel support" component, focused on administrators and general education teachers. Most participants viewed principals (61%) and special education administrators (62%) as generally supportive, although 39% of SLPs rated the support of both principals and special education administrators as only slight or nonexistent. In contrast, SLPs reported low levels of support and collaboration from general education teachers. Only 29% agreed that general education teachers believe SLPs should collaborate with them, while 71% disagreed or strongly disagreed. Similarly, 75% disagreed that general education teachers knew how to implement collaborative instruction. These responses suggest that many SLPs perceive general education teachers as lacking both the motivation and the knowledge to work with SLPs in collaborative language and literacy practices. *Research question four* explored SLPs' "personal experiences" with collaborative language and literacy instruction. Scores on these questions ranged from the minimum to the maximum, 3 to 12, with results indicating borderline positive perceptions. Approximately 40% of participants viewed collaboration as effective, 43% reported feeling satisfied, and 36% described the experience as enjoyable. Finally, the authors used the Pearson correlation coefficient to compare the personnel experience and the context scores. They found a moderate positive correlation ( $p < .001$ ), indicating that SLPs who valued collaboration also perceived greater environmental support. The authors found no significant correlation between personnel experience scores and years of experience ( $p = .497$ ), suggesting that appreciation for collaborative practices did not depend on how long SLPs had worked in schools.

*Synthesis of Training and Bridging the Gap.* Across the seven studies (Brimo & Huffman, 2023; Green et al., 2019; Heilman & Bertone, 2021; Koutsoftas et al., 2018; Pfeiffer et al., 2025; Poll & Hoffman, 2024; Ritzman et al., 2006), the research makes clear that insufficient training, both preservice and in-service, lack of administrative support, and role clarity issues continue to interfere with the implementation of classroom-based and collaborative services among school-based SLPs. Multiple studies emphasize the importance of preservice and in-service training as foundational to preparing SLPs for effective classroom-based service delivery (Brimo & Huffman, 2023; Green et al., 2019; Heilman & Bertone, 2021; Koutsoftas et al., 2018; Pfeiffer et al., 2025; Poll & Hoffman, 2024; Ritzman et al., 2006). Green et al. (2019) and Pfeiffer et al. (2025) found that while most SLPs receive some training after entering the workforce, preservice programs often lack adequate training opportunities for SLPs. The history of using the pull-out model continues as this gap in training continues to grow (Brimo & Huffman, 2023). Similarly, Heilman and Bertone (2021) and Poll and Hoffman (2024) discussed how practical training with a real-world application should be used over theory, especially in IEP development, and supporting interprofessional and inclusive service delivery. Researchers have also shown that structured, relationship-based training, such as university-school partnerships or joint preparation sessions, can improve collaborative skills and lead to better student outcomes (Koutsoftas et al., 2018). However, when schools fail to provide meaningful training and professional development and continued support, SLPs struggle to apply collaborative practices in their service delivery (Brimo & Huffman, 2023).

Administrative support continued to be a concern throughout this research as well. Ritzman et al. (2006) and Green et al. (2019) found that administrative assistance allowed for successful scheduling, student grouping, and staff collaboration to support the SLPs' efforts to

work in the classroom. Pfeiffer et al. (2025) also found that when leaders set clear role expectations and provide time for shared planning, SLPs and teachers' collaboration is more effective and successful.

Another factor of influence is the roles and responsibilities of SLPs and teachers. Brimo and Huffman (2023) found that although consultation was the most used collaborative model, true co-teaching was rare, due to unclear roles and insufficient time. Poll and Hoffman (2024) found that structured interprofessional experiences can shift teacher and SLP perceptions related to collaboration. Koutsoftas (2018) described a successful pilot in which graduate students successfully implemented classroom-based services, showing the value of preservice training on roles and responsibilities. Similarly, Ritzman (2006) showed how SLP-led staff education improved understanding and support for classroom-based services, showing how professional development, self-advocacy, and university-district partnerships are a step forward to address the challenges SLPs face. Together, the studies show how effective classroom-based service delivery occurs when there is adequate and coordinated training, clarification and communication of roles, and a strong administrative backing.

### **Discussion**

The 17 articles discussed in this comprehensive research review examined the literature on school-based SLPs and the use of classroom-based service delivery models when focusing on receptive and expressive language goals for students with high-incidence disabilities, primarily in general education classrooms. The findings, located in Table 2, focus on service delivery models supported by evidence-based practices, the underuse of classroom-based practices, and what factors influence the use of the classroom-based service delivery model. It also discussed how administrative support, training needs, and organizational factors, such as scheduling, play a

part in SLPs ensuring the use of the most appropriate service delivery model and use of LRE for their students with high-incidence language disabilities.

### **Research Question 1: Evidence-Based Models Research Support**

RQ1. What classroom-based service delivery models are supported by evidence-based research for the language goals of students with high-incidence disabilities?

The three research articles that provided evidence-based support spanned 23 years (Farber & Klein, 1999; Throneburg et al., 2000; Mitchell et al., 2022). There has been minimal research conducted over the past 20 years. Still, the studies strongly support the evidence that SLPs enhance classroom instruction for all students, both students on IEPs and their non-disabled peers, and that collaborative models further improve overall outcomes (Farber & Klein, 1999; Throneburg et al., 2000; Mitchell et al., 2022). The three studies focused on the need for shared planning time as well as administrative support as pillars of their success. The studies demonstrated the critical role of administrative and school-level organizational support in the successful implementation of classroom-based service delivery models (Farber & Klein, 1999; Green et al., 2019; Mitchell et al., 2022; Throneburg et al., 2000). Mitchell et al. (2022) moved beyond the SLP-skilled instruction of syntax and metalinguistic skills by focusing on how real-time scaffolding and in-the-moment instructional adjustments during classroom instruction allowed increased language learning for all students. Further studies have continued to reinforce these findings, emphasizing how collaboration and classroom-based services help shape effective service delivery. Green et al. (2019) found that their SLP participants considered classroom-based language goals a natural starting point for beginning collaborative practice. Similarly, the participant in Ritzman (2006) advocated to teachers and administrators to help move towards a more effective collaborative model in her school.

While the models were successful, the studies also revealed barriers that exist when implementing the classroom-based model. SLPs in Throneburg et al. (2000) were allowed extensive planning as they received grant funding that provided substitute teachers to allow for additional SLP-teacher planning throughout the study. While the SLPs in Mitchell et al. (2022) received collaborative training before the study, they reported that planning time during the experiment remained a challenge. Planning time remains a challenge for all professionals implementing classroom-based models, and schools must consider the need for structured collaborative planning time and substitute coverage within the constraints of the typical school day and budget. Farber and Klein (1999), Throneburg et al. (2000), and Mitchell et al. (2022) provided training and support for their SLPs, including pre-implementation collaboration, a stipend for extra collaborative sessions after the duty day, and extra planning time; this helped affect the success of their classroom-based model. These findings revealed that adequate training and role clarity are essential for collaboration to be successful. Lastly, in a recurring theme, Mitchell et al. (2022) emphasized the need for future research that examines SLPs' perspectives about collaborative models, particularly regarding feasibility, cost-effectiveness, and the relative effectiveness of different models, to ensure the findings remain practical and applicable to school-based practice, while Throneburg et al., (2000), focused on the need for future research focusing on the effectiveness of service delivery models for various types and severity levels of speech and language disorders. Farber and Klein (1999), Throneburg et al. (2000), and Mitchell et al. (2022) researched language intervention models. Continued research in that area, along with further research examining other EBP models, such as phonological awareness and narrative language, would help expand on the limited amount of evidence available to guide

SLPs' service delivery choices. Beyond focusing on EBP models of service, additional research on classroom-based service delivery would provide valuable guidance for SLPs.

Despite the need to provide classroom-based services, the evidence base supporting the SLP's role and effectiveness in classroom settings remains limited. The scarce amount of research available highlights critical areas for future investigation. Brandel (2020) argued that more research is needed that focuses on whether SLPs implement information from their training into real-world practice. Poll and Hoffman (2024) identified a lack of research that balances the perspectives of both SLPs and teachers regarding classroom-based services. Heilman and Bertone (2021) expressed a need for studies that offer authentic, real-world evidence of student progress beyond standardized test scores. Along with Green et al. (2019), they also expressed a desire for research that gives a better understanding of how organizational and systemic factors affect classroom-based therapy and effective strategies for promoting collaborative practice in schools. Finally, Heilman et al. (2024) stated that further research on evaluation methods to strengthen evidence-based models for service delivery is needed.

### **Research Question 2: Providing Classroom-Based Service Delivery**

RQ2. Why don't SLPs provide more classroom-based vs pull-out services for their students with language goals?

RQ2a. What administrative actions can support SLPs in providing services in the LRE?

RQ2b. What factors influence an SLP's choice of service delivery environment?

RQ2c. What training is needed for SLPs and teachers to provide more classroom-based service delivery?

The literature addressing RQ2 discusses factors influencing service model choices by SLPs and identifies barriers to providing classroom-based service delivery. Across both

qualitative and quantitative research, recurring themes related to these barriers emerged, suggesting that SLPs, schools, and districts must overcome the systemic issues for classroom-based interventions to be effective (Brimo & Huffman, 2023; Poll & Hoffman, 2024). Successful service delivery needs strong administrative support, manageable scheduling, and dedicated time for collaboration (Ritzman, 2006; Mitchell et al., 2022; Pfeiffer et al., 2025). Green et al. (2019) found that their SLP participants considered classroom-based language goals a natural starting point for beginning collaborative practice. Similarly, the participant in Ritzman (2006) advocated to teachers and administrators to help move towards a more effective collaborative model in her school. Farber and Klein (1999), Mitchell et al. (2022), and Throneburg et al. (2000) also demonstrated the successful implementation of collaborative models in their studies with the help of collaborative planning time and administrative support for students with language disorders. Regardless of these successes, the impact of influencing factors and barriers affected SLPs' service delivery model choices.

While collaborative and interprofessional practices have a history of improving student outcomes and supporting inclusive education, persistent barriers, such as large caseloads, insufficient planning time, and inconsistent administrative backing, continue to impede greater levels of success (Green et al., 2019; Heilman & Bertone, 2021; Pfeiffer et al., 2025). Differing perceptions between SLPs, administrators, and general education teachers support the need for ongoing communication between professionals, more targeted training and professional development, and continued advocacy to clarify roles and improve teamwork (Poll & Hoffman, 2024; Brimo & Huffman, 2023). System changes at the school and district levels are vital to helping bridge the gap for SLPs as they move evidence-based practices into real-world classroom applications. These changes must include infrastructure that supports collaborative

meetings, manageable workloads, and preservice and in-service training on classroom-based service models (Green et al., 2019; Pfeiffer et al., 2025). Without these organizational supports, collaborative, curriculum-based speech and language services may remain underutilized, limiting the use of LRE for speech and language students.

Other areas of research make clear that insufficient training, both preservice and in-service, continues to interfere with the implementation of classroom-based and collaborative services among school-based SLPs (Green et al., 2019; Heilman & Bertone, 2021; Pfeiffer et al., 2025). Graduate programs often fail to prepare SLPs for interprofessional roles, with studies reporting that only a small percentage of SLPs and school administrators receive adequate training in inclusive or collaborative models (Carlin, 2022; Green et al., 2019). Brandel (2020) added that graduate programs must provide programs that help SLPs to navigate the complex educational environments in which they work. Even when professional development is available, many SLPs report feeling unprepared, suggesting that current training lacks practical application (Pfeiffer et al., 2019). Researchers have also shown that structured training, such as university-school partnerships or interprofessional preparation sessions, can improve collaborative skills and lead to better student outcomes (Farber & Klein, 1999; Koutsoftas et al., 2018). Brandel and Frome Loeb (2011) also highlighted the limitations of traditional internship models, which often focus only on therapy room interventions. They argued that the use of this model does not adequately prepare SLPs to use collaborative, classroom-based service delivery or to evaluate the benefits and limitations of different models. Schools and districts must expand and improve training and professional development opportunities and mentorship programs to reach a broader audience. Although ASHA provides training for SLPs, dissemination of this information should not end there. Administrators, teachers, and support staff must also leverage SLPs' expertise to

create more collaborative school schedules and to recognize the importance of interdisciplinary collaboration for all students. Professional development should include strategies for collaboration and evidence-based practices that demonstrate how SLPs contribute to classroom success. Collaboration across professionals in education, including special educators, general education teachers, occupational and physical therapists, SLPs, and other professionals, has the potential to create outcomes for students that exceed what any individual professional can do alone. Too often, professionals lack awareness of each other's unique skills. By using a more interprofessional collaboration approach, schools can help maximize student learning through multiple levels of expertise in both instruction and intervention. This multi-pronged approach to training promotes broader skill development rather than serving as just a 'how-to' manual for SLPs.

SLPs face difficulties when schools fail to provide meaningful training experiences and support. They struggle to apply collaborative practices and face systemic barriers that further limit their effectiveness (Armstrong et al., 2023; Brimo & Huffman, 2023). Green et al. (2019) found that while SLPs value collaborative practice, they find it ineffective for most of their caseload. Challenges remain for SLPs while building their classroom-based service delivery skills. Universities and school districts need to provide training that helps SLPs build confidence, clarify their roles, and develop the skills necessary to overcome challenges when choosing their service delivery models.

University programs give future SLPs the basis upon which they will practice. Evidence-based decision-making practices are an essential part of a graduate SLP curriculum. All universities, not only those with an education-focused SLP curriculum, should incorporate coursework and fieldwork related to classroom-based services into their programs (Pfeiffer et al.,

2025; Poll & Hoffman, 2024). This knowledge helps build their skills to evaluate and implement effective services in their future practice. However, research suggests that gaps remain in how effectively preservice training addresses real-world service delivery challenges within collaborative models and inclusive interventions (Poll & Hoffman, 2024). These gaps continue to grow because of the limited availability of high-quality research to guide service delivery decisions, particularly in areas like treatment intensity, classroom-based therapy, and interprofessional collaboration (Heilman & Bertone, 2021). For this reason, university training programs have the responsibility to give quality training that focuses on putting evidence into practice. The need for quality training leads to a call for better research to allow for strong academic preparation and more effective clinical applications.

Overall, the literature consistently highlights the importance of role clarity and interprofessional collaboration to effectively deliver classroom-based services by school-based SLPs. Research consistently shows that when SLPs and teachers clearly understand their distinct roles and collaborate using strong interpersonal skills, they more effectively support student outcomes (Green et al., 2019; Poll & Hoffman, 2024). Heilman et al. (2024) highlighted that SLPs must make the shift from the historical speech-language pathology deficit-based approach to one centered on student engagement and classroom function. An SLP who took part in the study stated it best: “We learn more about the least restrictive environment and when we learned about that, it was like, oh, this is the law, and this is really where we should be starting—in the classroom” (Heilman et al., 2024, p. 243). Conversely, unknown role expectations, limited understanding of each other's expertise, and insufficient non-technical skills hinder the development of meaningful collaborative relationships (Brimo & Huffman, 2023; Poll & Hoffman, 2024). Teachers' unfamiliarity with professional responsibilities and their reduced

willingness to collaborate enhance the barrier to working towards effective classroom-based services (Brimo & Huffman, 2023). Non-technical skills needed for role clarity, such as leadership, confidence, and flexibility, are essential to collaborative practices (Heilman & Bertone, 2021). Presently, SLPs still face classroom-based challenges because professionals often misunderstand each other's roles and responsibilities, and they continue to hold differing opinions about collaborative services. This continued misunderstanding leads to a need for a strong base of professional training and ongoing support.

## **Conclusion**

This Capstone literature review focused on 17 articles covering 26 years of research. As seen in the *2024 ASHA Schools Survey* and the research, very little change in service model delivery choice occurred during those 26 years, even in light of the federal judicial decision of addressing FAPE in 2017 that clarified the definition of 'appropriate education' (Andrew F., 2017). There remains a critical need for quantitative and qualitative research focused on classroom-based service delivery in areas of phonological awareness, narrative discourse, language and literacy, and appropriate use of language facilitation techniques (Cirrin et al., 2010). Critical gaps remain in research evidence that focus on EBP models, EBPs for classroom-based delivery, and research-to-practice frameworks. These gaps leave SLPs to make reason-based decisions without an evidence-based program to guide them. While existing research supports the value of collaboration in improving vocabulary development, questions remain about research effectiveness in other areas of language growth, particularly as students move up in grade levels. Which additional areas of language benefit from classroom-based services? Addressing this question may encourage SLPs to increase their involvement in classroom-based approaches, knowing their efforts can significantly improve students' language development. To

move forward with more consistent implementation of classroom-based services by SLPs for our high-incidence language-focused students, a step-by-step, multidirectional, and multidisciplinary systematic approach is needed.

### **Section 3: A Plan**

#### **Urgency Moving Forward**

The research presented in this Capstone shows the continued limited use of classroom-based service delivery by SLPs for students with high-incidence disabilities who receive speech-language services for receptive and/or expressive goals. The movement towards broader implementation has been slow and often blocked by both large and small barriers, obstructing the needed change. What we do know is that there are research studies, though limited, that demonstrate the positive impact of classroom-based services for students with high-incidence disabilities who receive speech-language services (Farber & Klein, 1999; Mitchell et al., 2022; and Throneburg et al., 2000). The research has also identified the barriers to an expectation that classroom-based services will be utilized and expanded in IEP's to fully support FAPE in the LRE (Armstrong et al., 2023; Brandel, 2020; Brandel & Frome Loeb, 201; Brimo & Huffman, 2023; Carlin, 2022; Evans et al., 2025; Green et al., 2019; Heilman & Bertone, 2021; Heilman et al., 2024; Koutsoftas et al., 2018; Pfeiffer et al., 2019; Pfeiffer et al., 2025; Poll & Hoffman, 2024; Ritzman et al., 2006). Moving forward, SLPs and their professional collaborators must first acknowledge the need for change and then engage in coordinated efforts to address the barriers that limit progress.

The underuse of classroom-based services for our high-incidence language disabilities students shows an urgent need for the profession to prioritize this service delivery model and make it a more standard practice within schools. Making this shift ensures schools do not risk restricting their students' access to FAPE and reducing the services available in the LRE. In the short term, targeted actions can help reduce immediate barriers, but lasting improvement depends

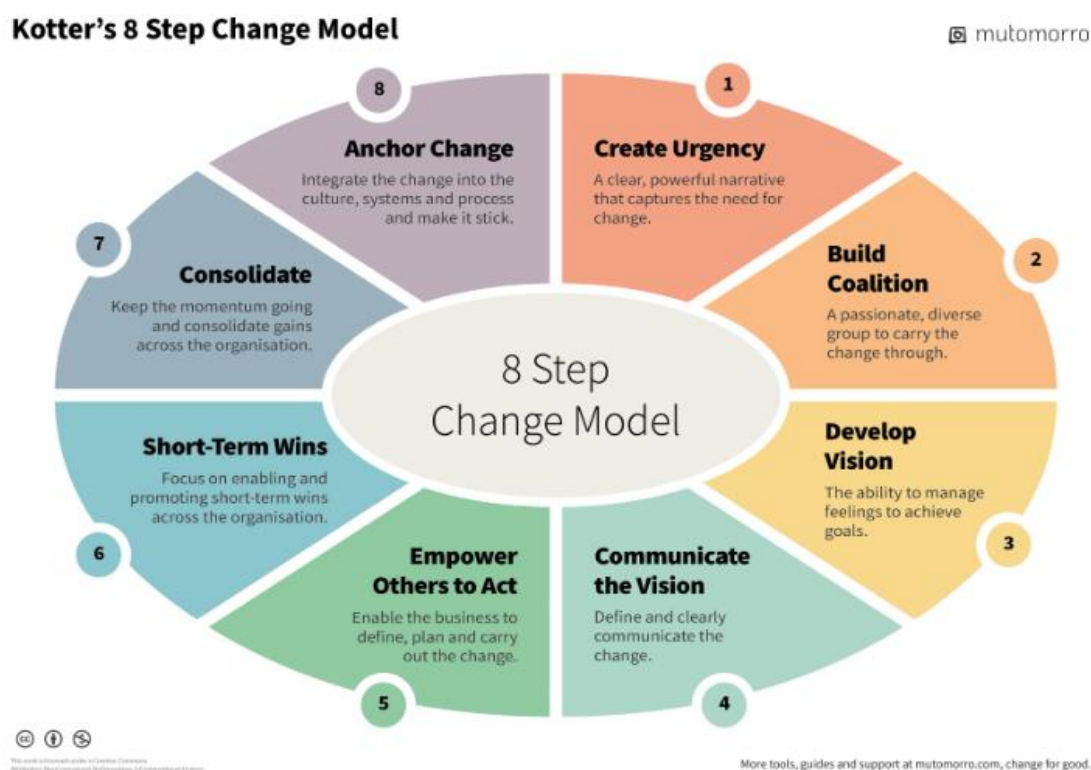
on addressing the deeper systemic issues. To move forward, change must occur across the national, state, district, and school levels.

For change to happen, SLPs and their special education teams must be motivated by the need to provide an appropriate education for all students by designing appropriately ambitious (Andrew F., 2017) IEPs that lead to the delivery of EBPs during classroom-based lessons. They should build a coalition across organizations to ensure this goal is achieved (Pfeiffer et al., 2019). Research remains vital to examine not only the acquisition of skills, but also the ability for them to be maintained and transferable across settings (Armstrong et al., 2023). Although mastering some goals may take longer, the classroom setting is where students practice and apply their language skills during daily lessons. This environment supports easier maintenance and provides more opportunities for generalization to real-world applications that the pull-out model cannot reproduce (Mitchell et al., 2022; Throneburg et al., 2000) The goal is to expand the scope of what students can achieve while supporting their ability to attain, maintain, and transfer their language skills (Armstrong et al., 2023; Evans et al., 2025).

### **Model to Lead Multi-Level Change**

Figure 4 shows Kotter's (1996) *8 Step Process for Leading Change*. Dr. John P. Kotter (1996) wrote about a practical approach to an organized means of leading, not managing, change. In his book and on his website, he presents an eight-stage process of change with practical examples that show how to go about leading that change in organizations (Kotter, 1996).

Figure 4

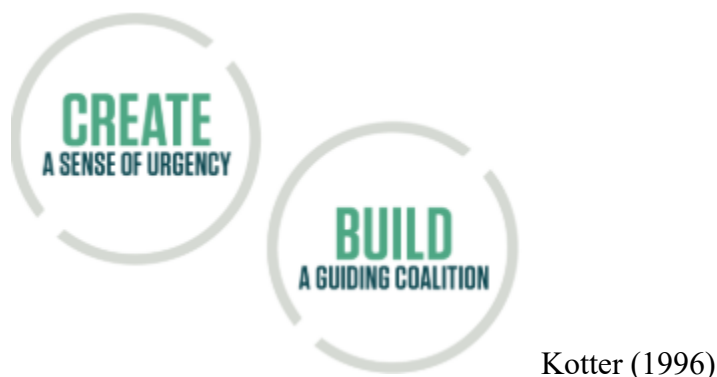
*Kotter's 8 Step Change Model*[Kotter's 8 Step Change Model - Easy Walkthrough - Mutomorro](#)

The focus in this plan will be to build a sense of urgency by pulling together the barriers identified from the systematic research review in Section 2 and identifying these barriers across the key organizational levels of national, state, district, and school. From this synthesis, the plan provides research-based priority actions focused on identifying barriers at each organizational level, as seen in Table 3. The purpose of these endeavors for this Capstone project is to work through Kotter's (1996) first two steps, *Creating a Sense of Urgency* and *Building a Guiding Coalition*, while simultaneously forming a coalition of like-minded stakeholders across the national, state, district, and school levels. These coordinated actions drive the urgency needed to break down existing barriers and initiate change. The goal is to promote effective classroom-

based service delivery, ultimately leading to the identification of successful interventions (Kotter, 1996). Although all eight steps of the change model would need to be engaged in for the complete success of this plan, this product for practitioners focuses on the first two steps of Kotter's (1996) leadership change framework: Step 1. Creating a Sense of Urgency and Step 2. Building a Guiding Coalition, which is displayed in Figure 5. These initial steps are necessary for all SLPs to establish the foundation needed to expand classroom-based service delivery and better support students in the future. Findings from Section 2 created this sense of urgency and served as the foundation for the recommended improvements outlined in this plan.

### Figure 5

#### *Kotter's First Two Steps*



### Table 3

#### *Barriers to Classroom-Based Services by Education Organizational Level*

Author(s)	Barrier(s) Identified	Education Organizational Level
Effective Models of Evidence-Based Research for Classroom-Based Intervention (RQ1)		
Farber & Klein (1999)	Underuse of effective collaborative methods	School, District, and State
Mitchell et al. (2022)	Limited planning time and agreed-upon focus for collaboration	School and District

Throneburg et al. (2000)	The need for extensive planning time	School and District
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Classroom-Based Service Delivery Model Barriers (RQ2)

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Organizational and Administrative Challenges (RQ2a)

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Pfeiffer et al. (2019)	Lack of training and large caseloads	School, District, and State
Carlin (2022)	Lack of administrative support	School and District
Heilman et al. (2024)	Lack of administrative support	School and District
Evans et al. (2025)	Organizational factors and insufficient training	School, District, and State

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Factors Influencing Service Delivery Choice (RQ2b)

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Brandel & Frome Loeb (2011)	Large caseload size	School and District
Brandel (2020)	Large caseload size	School and District
Armstrong et al. (2023)	Lack of confidence/willingness, time constraints, and organizational factors	Individual, School, and District

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Training and the Bridge Gap (RQ2c)

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Ritzman et al. (2006)	Insufficient planning and a lack of administrative support	School and District
Green et al. (2019)	Insufficient planning time and scheduling constraints	School and District
Brimo & Huffman (2023)	Lack of training and lack of awareness of roles and responsibilities	School, District, and State
Poll & Hoffman (2024)	A resistant attitude towards the use of interprofessional practice	Individual, School, and District

Koutsoftas et al. (2018)	The need for collaborative training and planning	School, District, and State
Heilman & Bertone (2021)	Lack of interprofessional collaboration training	School and District
Pfeiffer et al. (2025)	Lack of professional development and administrative support	School, District, and State

This Capstone plan identifies broad priorities across national, state, district, and school levels. Although presented in this order, working to build a sense of urgency is not a top-down process. Lasting change must occur at all levels, with vital members coming from the school level, where students benefit the most. Each level of the plan will address the barriers identified in Section 2, which are organized according to these four levels: national, state, district, and school. Alongside each barrier, the plan will provide benchmarks and suggested outcomes while moving through the frameworks of change at each of the organizational levels. Benchmarks act as stepping stones to guide us forward, while outcomes are flexible and serve as starting points for practice and improvement. Using Kotter’s (1996) steps, the plan aims to inspire a sense of “leading a change” by identifying the weaknesses within the coalition teams and strengthening them by involving stakeholders from all organizational levels. The process encourages professionals from organizations, state and local governments, and schools to build a coalition. It develops a shared vision that encourages others to participate in delivering classroom-based services. The plan’s benchmarks and outcomes provide direction for all levels of organization, while still allowing for adjustments that best serve the needs of their students.

**Table 4***Multi-level Organizational Areas of Priority*

Level of Education Organization	Areas of Priority
National	Credentialing Grants Professional Development Research
State	Licensing Professional Development Funding Policy Institutes of Higher Education (IHE)
District	Staffing Professional Development and Training Openness to Shifting Services
School	Cultural Shift Training & Information Sessions SLP-Teacher Collaboration/Planning Time Administration Parental Involvement

The overarching goal is to help students use their skills within the classroom environment where those skills are expected to occur. It provides them with the most appropriate level of FAPE that not only increases their ability to generalize skills, participate in classroom social opportunities, and access all teacher-led academic activities but also ensures that services align with best practices in inclusive education (Archibald, 2017; Brandel, 2020).

The resulting product from this Capstone will be an ‘Informational Poster Presentation’ designed to be delivered at the ASHA National Convention in November 2026, in Indianapolis, Indiana. Before the conference, a presentation, as seen in Appendix A, will be made at the Overseas Association of Communication Sciences (OSACS) fall 2025 conference to SLPs from schools around the European Region, the district professional development day to SLPs in the

author's five district schools, and within the author's school to the special education department and professional leadership team. Attendees of the poster sessions will receive tailored handouts specific to their organizational level, found in Appendices B through F. Those handouts will provide key information about how each level supports SLPs in their work. More importantly, they will serve as a call to action by focusing on specific steps SLPs, special education teachers, and general education teachers can take within their schools, districts, and states to ensure the provision of FAPE for all their students. In addition, the information will help SLPs discuss what classroom-based services are, how they connect to FAPE, and why moving towards this model supports inclusive learning for students who learn best in their natural classroom environment.

### ***National Level Action Priorities***

Major organizations, including government, private, not-for-profit, and professional groups, affect the profession of speech-language pathology. The plan at the national level will focus on what the leadership of federal agencies (e.g., Office of Special Education Programs, OSEP) and a national organization (e.g., ASHA) has responsibility for, and hence the ability to stimulate discussions that work to build a coalition. Several responsibilities emerged from Section 2 that are discussed in the national level priorities, including credentialing, professional development, grant funding, and publishing research.

**Credentialing.** Upon graduation from master's programs, SLPs have flexibility when entering the job market. While a master's degree provides general knowledge, additional training and certificates beyond formal schooling are available in both pediatric and adult practice areas. Although ASHA certification is voluntary, membership lets employers know that the SLP has met rigorous professional standards, is committed to ongoing professional development, and often benefits from easier access to state licensure (ASHA, n.d.). SLPs may pursue different

areas of practice, but only *three fields* currently offer board certification: swallowing (BCS-S), fluency (BCS-F), and child language (BCS-CL). Future differentiation within the profession will likely require changes in certification and specialization options, and ASHA already maintains a credentialing infrastructure that could support such changes.

ASHA provides its members with a credentialing infrastructure using a two-stage application process to establish a new area of practice for specialty certifications, which are overseen by the Council for Clinical Certification (CFCC) and reviewed by the Committee on Clinical Specialty Certification (CCSC). This ASHA provided information supports the possibility of introducing additional educational certifications and licensure (ASHA, n.d.-a). Incremental steps could include updating the CCC-SLP standards to incorporate competencies in classroom-based service delivery, or developing a “Board Certification in Classroom-Based Service Delivery in Schools” modeled on existing specialty credentials (ASHA, n.d.-c). The goal of this recommendation is to advocate for the addition of a new licensure pathway that recognizes and supports expertise in classroom-based service delivery.

**Grants.** To move forward at the national level, OSEP and ASHA can continue and expand to collaborate on a portion of the discretionary grant funds to have them redirected towards collaborative efforts between speech-language-hearing and special education to focus directly on collaboration through classroom-based service delivery. State-administered program grants and competitive grants for other discretionary programs in the areas of professional development at institutions of higher education (IHEs) could be designated to promote collaborative training and graduate school-level training and mentorship (DOE, 2024). A change that OSEP can make moving forward is to re-establish its labeling and change embedded language that reads as ‘related services’ and replace it with SLP-specific language in grants for

individuals with disabilities within IDEA Part B formula grants (DOE, 2024). Strategic changes through funding at the top can pave the way for improvements at every level of the educational framework.

**Professional Development.** ASHA's professional development for school-based SLPs includes a learning pass (unlimited access to practical, evidence-based online courses for one annual fee) for continuing education units, as well as other classes offered both free and for payment throughout the year (ASHA, n.d.). We need to continue focusing on classes and programs that emphasize school-based collaboration as well as delivering services directly in the classroom. Across the ASHA website, resources such as toolkits, advocacy guides, and reference pages highlight interprofessional practice and strategies for integrating SLP expertise into classroom instruction. To evaluate the impact of these initiatives, benchmarks should track both participation in collaborative, classroom-based professional development courses and the corresponding increase in the use of classroom-based services, as reported in the ASHA Schools Survey.

**Technical Assistance.** The Office of Elementary and Secondary Education (OESE) and OSEP fund and provide technical assistance (TA) through comprehensive centers, equity assistance centers, and state support networks (DOE, 2025). OSEP and IDEA Part D further enhance this support through discretionary grants that fund state personnel development, technical assistance, and dissemination efforts (DOE, 2024). OSEP funding is currently used in Oregon and Kansas, focusing on MTSS and classroom collaboration (Kansas Technical Assistance System Network [KTASN], 2025; Oregon Response to Instruction and Intervention [ORTIi], n.d.). Although these programs do not specifically target SLPs, they focus on interprofessional practices by encouraging collaboration between SLPs, general education

teachers, and special education staff within schools. Regional training centers can provide specialized TA modules to serve as an entry point for instruction, but they require continued funding (DOE, 2025). Expanding and maintaining funding for what was guaranteed would allow TA systems to expand their support to include classroom-based service delivery for SLPs through more targeted training opportunities.

**Research.** There is an urgent need within the publishing arena to prioritize and expand research within the immediate future, as journals serve as the primary platform to disseminate scientific and academic findings, to advance research, and preserve a historical record of progress (Casadevall et al., 2024). Organizations, such as ASHA and the Council for Exceptional Children (CEC), need to begin calling for and disseminating research that focuses on four areas: EBPs, SLP-teacher collaboration, classroom-based service delivery, and the SLP shortage. These professional organizations can direct research and research-to-practice by calling for studies that focus on classroom-based models or practices that target students with high-incidence language needs. Universities or colleges and other research groups will respond to this emphasized area with research focused on this area. One approach may include devoting an annual issue or a special series in the CEC's *Teaching Exceptional Children* and ASHA *Perspectives* (focused on Special Interest Group 16) to classroom-based service delivery EBPs, highlighting SLP-teacher collaborative programs that focus on access to LRE and its impact upon FAPE, or include a section in every issue dedicated to EBPs related to classroom-based service delivery. Additionally, ASHA and CEC should collaborate with the private publishing houses to increase this research across journals as well as professional conferences at the state and national levels. Synthesizing findings across all the studies will help to strengthen the EBPs used in schools and districts and ensure consistent use of effective practices in the classroom. A fourth area that

directly correlates is the need for research that addresses the availability of SLPs while ensuring those in the schools are trained to deliver services in the classroom setting (ASHA, 2024).

Research may focus on the development of a consulting or a co-teaching model where SLPs would train, mentor, and support teachers on EBPs (Mitchell et al., 2020). Continued research and focus would be on the continuing education and professional development needed to maintain and support this service delivery in school environments (Brandel, 2020; Pfeiffer et al., 2019; Pollack Zurawski, 2014).

**Outcomes at the National Level.** Success at the national level will ultimately provide SLPs with a greater level of training in classroom-based service delivery and evidence-based practices that they can apply in schools. Change at this level is critical because national-level benchmarks create a sense of urgency that drives transformation across all other levels of education. These benchmarks emphasize that success depends on achieving measurable outcomes in key areas such as credentialing, grant funding, professional development, and research and publication.

The possible outcomes include the addition of a new licensure pathway that recognizes and supports expertise in classroom-based service delivery, thus enabling school-based SLPs to enter a school ready to deliver effective services from the start of their careers. As a result, students on IEPs will have greater access to learning opportunities in the LRE, supported by classroom-based models that meet the individual needs of each student. Federal grants could direct increased funding to states and districts to support professional development that focuses on collaboration and classroom-based service delivery. Similarly, greater visibility of ASHA professional development opportunities focused on classroom-based practices would help establish this model as a professional expectation and ensure sustainability. Expanded access to

TA resources across states would help increase the number of SLPs entering the workforce with applied classroom-based service delivery training. Finally, a growth in research publications that focus on the evidence base that establishes classroom-based services as an EBP for SLPs working with students with high-incidence disabilities, along with the implementation of consultation or co-teaching models in states and districts with significant SLP shortages, would reinforce that evidence base. For these efforts to succeed, they must move forward together. Coordinated movement across all areas is essential to make lasting change for SLPs and their students.

### **Table 5**

#### *National Level Benchmarks and Outcomes*

Benchmarks	Possible Outcomes
<b>Credentialing</b>	
Development of a proposal for Board Certification in School-Based Service Delivery, modeled after existing BCS specialties.	Districts and states can more easily identify SLPs with specialized credentials to lead collaborative practice initiatives.
Update to CCC-SLP standards to include competencies in classroom-based service delivery.	School-based SLPs graduate or enter the workforce with recognized, evidence-based training in classroom-based service delivery.
<b>Grants</b>	
Federal grants issued through OSEP specifically name SLPs and classroom-based service delivery as priorities.	Increased availability of funding for states and districts to provide professional development, mentorship, and planning for classroom-based services.

Revisions or guidance updates in IDEA that clarify SLPs' role in providing services in the LRE and supporting FAPE.

Alignment of federal grant language that explicitly recognizes SLPs' contributions to inclusive education, leading to stronger adoption of classroom-based models across states and districts

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### Professional Development

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Expansion of SPDGs to include training for collaborative classroom-based service delivery

An increase in the number of SLPs entering the workforce with applied collaborative classroom-based service delivery training

Creation of TA modules on classroom-based service delivery within OSEP regional training centers.

Broader access to TA resources for practicing SLPs across states, particularly in rural areas

Development of toolkits and guides specifically targeting classroom-based service delivery and interprofessional collaboration, and the inclusion of advocacy training modules highlighting how SLPs' skills support general and special education outcomes.

Broader awareness across the profession that collaborative, classroom-based service is an expectation, not an optional model, and improved confidence and skill among SLPs in advocating for their role in the classroom.

Annual tracking of SLP participation in collaborative-focused PD (via ASHA Learning Pass, conferences, and webinars)

Increased visibility of ASHA PD offerings on classroom-based service delivery.

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### Research

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Increase the number of peer-reviewed studies published annually on classroom-based service delivery, SLP-teacher collaboration, consult and co-teach models, and EBPs for high-incidence language needs.

Growth in the evidence base that establishes classroom-based services as an EBP for SLPs working with students with high-incidence disabilities. Implementation of consultation or co-teaching models in states and districts where there are significant shortages of SLPs.

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### *State Level Action Priorities*

Actions at the state level center on the work of state departments of education, along with the IHEs within those states. Together, these organizations make the state level one of the most vital areas for enacting change. The state departments of education oversee licensing, professional development, funding, and policy. The IHEs conduct research and prepare undergraduate and graduate (preservice) level SLPs through training within their programs.

**State Department of Education.** All states require state licensure independent of ASHA credentialing. As stated in the introduction, ASHA's state licensure database shows that there are nine states that currently require advanced coursework or additional Praxis exams as their school-based license requirements. These few additional requirements for licensure represent limited efforts toward strengthening school-based licensure requirements at the state level. Key questions remain: What will it take to achieve broader national change, and how can state universities partner with state departments of education to expand training and professional development opportunities for SLPs in this area?

The State Departments of Education (SEA) and changes at the state-level play a critical role in driving urgency and leading coalitions to help make changes. While the specific goals of each SEA vary by state, most focus on equitable education for all students, improving teaching and learning, advocacy, policy-making, and resource distribution (California DOE, n.d.; Maryland DOE, n.d.; Virginia DOE, n.d.; Wisconsin Department of Public Instruction [WDPI], n.d.). The purpose of this product is to build a sense of urgency, and changes at the state level may offer the greatest opportunity for that impactful change. SEAs also collaborate with their state IHEs, particularly implementing federally funded initiatives such as State Personnel Development Grants (SPDG). This collaboration helps move the research findings to schools

within the local education agencies (LEAs) and may impact the coursework and training of undergraduate and graduate SLP programs.

State education agencies (SEAs) play a critical role in supporting SLPs' ability to provide classroom-based services. States must comply with the rules and regulations of the federal government, and in turn, the government writes policies that LEAs follow. This pattern allows for states to assist in the growth of the number of SLPs within that state who use classroom-based services through licensing, professional development, funding, and policy changes.

**Licensing.** Currently, nine states require additional coursework or exams for state licensure. For example, Connecticut requires up to 36 credit hours in coursework related to the growth and development of exceptional children, while Maine requires school-based SLPs to take the Praxis II *Teaching Speech to Students with Language Impairments* in addition to the national certification exam (ASHA, n.d.). Over 50% of SLPs in the United States register as school-based with ASHA, yet only 18% of states have made progress toward offering specialized coursework at the graduate school level for SLPs working in education (ASHA, n.d.).

State licensure qualifications are not consistent across states, but currently, licensure policy across states is about to make a significant shift. The Audiology & Speech-Language Pathology Interstate Compact (ASLP-IC) Commission, which oversees the compact, is currently finalizing required rules, bylaws, and a data-sharing system (ASHA, n.d.-d). Once the compact finalizes, it will allow all participating SLPs, no matter their work setting, to practice across state lines without needing to obtain a new license in each state once they've obtained their original license in one of the participating states. As of 2025, 36 states and one U.S. territory have agreed to participate by allowing this consistency in licensure and professional mobility for SLPs in

their areas. The commission has not yet released descriptions of the specifications needed for the license. As a result of this change to licensure, SLPs will be allowed increased professional mobility and a streamlined licensing process, which may help address SLP shortages (ASHA, n.d.-d).

**Professional Development.** Currently, only 18% of states require SLPs to take an additional class or exam before working in the schools (ASHA, n.d.). State Personnel Development Grants (SPDGs) that focus on classroom-based collaboration will give a greater number of school-based SLPs the training to provide services. SEAs can direct and provide resources for PD while issuing guidance on providing classroom-based services that align with the principles of LRE and FAPE. A potential next step is revising professional learning credit requirements to include competencies specific to school-based SLPs. These PD offerings should include a focus on joint planning, interprofessional practices, and co-teaching strategies (Pfeiffer et al., 2019). Offering both in-person programs and online options would make the PD more accessible to a broader population of SLPs (Stehle Wallace et al., 2021). One example is the Kansas SPDG, which funds the Kansas MTSS and Alignment program to provide ongoing training and implementation support in interprofessional collaboration (Kansas Technical Assistance System Network [KTASN], 2025). This is an example of a working PD system providing joint SLP-teacher training in collaborative methods.

**Funding.** Changes in funding and resource allocation at the state level require policy changes. States can obtain both formula and non-formula (discretionary) grants, which they can distribute to local education associations (LEAs) (DOE, 2025). Grants such as these can support pilot demonstration programs to support classroom-based service delivery training at the district and school levels. Importantly, funding within the SEAs is not always from the education side of

the federal government (e.g., OSEP). Funding can also come from other government agencies (e.g., Department of Health and Human Services) if the research aligns with the mission of the grant (DOE, 2025). In some cases, states restructure federal formula grants into competitive processes, such as Title I and Title III funds, which schools can apply to for SLP services for qualifying students (DOE, 2025).

**Policy.** Focusing on policy means a framework shift as the SEAs focus on rules and role clarifications. Each SEA can define what LRE-based service delivery looks like across school levels, disabilities, and service needs, using tools such as caseload versus workload calculators. Best practice memos and guidance should explicitly address classroom-based models and emphasize the SLP's need to continue training and focus on LRE. States such as Virginia and Arizona currently offer guidelines for best practices on the state Department of Education pages, with special focus on classroom-based service delivery. These state best practice guidelines are models for other states to follow. (AZ-TAS, 2023; Virginia DOE, 2022).

**Institutions of Higher Education (IHE).** Many IHEs involved with preparing SLPs and other professionals to work in public schools have several responsibilities that include preparing professionals to work in schools, contributing to the professional research of their field, providing the highest current level of clinical practice, and developing and participating in community partnerships. These changes affect not only preservice licensure preparation but also advanced graduate-level professional development. To remain competitive in enrollment, IHEs will need to adapt to these evolving requirements. While not specific to the target students with IEPs, an example of working towards change is at the University of Maryland Autism Research Consortium, where an interdisciplinary group of researchers, clinicians, service providers, and

autistic advocates converge to research, train, and form partnerships (University of Maryland Autism Research Consortium, n.d.).

Partnerships between SEAs and universities are necessary for growth in training and professional development at the university level. Collaboration between the two agencies already occurs in some states with proven success, showing the need for this model to be used to build training in classroom-based service delivery. Because school-based SLPs rarely initiate research independently, collaboration with state agencies and IHE agencies will help build the research-to-practice model and expand practice-based evidence. Research focus may begin with single case studies with a goal of advancing to larger group designs focusing on the EBPs for students with high-incidence language needs. This could include participation in community projects such as the Kansas MTSS and Alignment Program (KTASN, 2025). Small, incremental changes at the state or national level would prompt IHEs to adapt quickly, ensuring SLPs enter the workforce with the skills to be effective, collaborative, classroom-based providers.

***Preservice Training.*** Koutsoftas et al. (2018) found that graduate school practicums should provide SLP graduate students with a comprehensive look at classroom-based service delivery. Unlike special education majors, who train during their undergraduate years, preservice (university master's level students) training for SLPs occurs at the graduate level. Graduate programs in speech-language pathology typically have very limited flexibility in their curriculum. However, they can move forward by integrating their programs with coursework and practicums that emphasize more school-based and collaborative practices. A shift by ASHA to revise educational certifications or licensure, or a change in state licensure qualifications to include competencies in classroom-based service delivery, would mean an adaptation of curriculum and practicums in graduate programs for SLPs to prepare them for school-based

positions. Redefining practicum requirements would ensure SLPs interested in working in schools gain supervised experience in collaboration and classroom-based service delivery, preparing them to implement these practices in their first professional positions.

***Current Research Practice in IHEs.*** Research at IHEs can be the catalyst for a change in an SLP's service delivery, course changes or improvements, and licensure standards at the state or national level. The reverse is also true: policy changes at the national or state level can prompt the need for research and community involvement. Green et al. (2019) found that only 29% of participants had received university-level collaboration training, a gap that federal or state research grants can help address through professional development, teaching, and the creation of new evidence-based programs. By training graduate students and partnering with local schools, these universities strengthen service delivery and reinforce the value of SLPs and related professions. For example, *Project Early*, an OSEP Leadership Grant at the University of Kansas, is a 5-year grant to prepare special education teachers and SLPs in both areas. The students receive tuition assistance and funding to attend professional development conferences, all while attending their master's level classes together (Kansas University Center on Disabilities, 2025). Similarly, the San Diego State University Research Foundation runs the *¡Puede!* Project. It focuses on preparing SLPs and school psychologists in interdisciplinary collaboration in assessments, interventions, and consultations for bilingual students (San Diego State University [SDSU], 2025). These initiatives provide mentoring, training, and readiness skills to SLPs, along with other professions, in collaboration during their university years. Within these universities, those professors who maintain ongoing research help to identify best practices to improve outcomes for students with disabilities, especially those with receptive and expressive language delays. Research that compares pull-out versus push-in service delivery models for language

students would help solidify effective evidence-based practices, ensuring students receive services in the LRE, as mandated by IDEA. Archibald (2017) highlights the limited evidence in this area and advocates for reason-based practice in the absence of robust research, while Ehren (2000) calls for stronger collaborative models to address this gap.

Grants awarded to universities help students with tuition, provide training and mentorship, and build collaboration skills for those SLPs moving into school-based service. The Capstone discussed two examples, but universities throughout the United States may hold other grants as well (Kansas University Center on Disabilities, 2025; SDSU, 2025). Moving forward, these graduates will bring expertise and leadership into their districts, mentoring other SLPs and strengthening collaborative practices. To succeed, the coalition must develop a shared vision (Kotter, 1996), and research generated by IHEs will be vital to shaping and supporting that vision.

***IHEs and the Community.*** IHEs, especially state-funded, have a critical role to play in their immediate and broader communities. Koutsoftas et al. (2018) demonstrated this concept by developing a university-school partnership that originated from a speaking engagement in the partner district. Across the country, similar partnerships exist between universities and LEAs, enabling collaborative initiatives that support both professional development and service delivery. For example, Towson University's *Project LINC* is a two-year interprofessional training program for graduate students in speech-language pathology and special education (Holman et al., 2025). The program emphasizes collaboration with school districts through clinical placements and simulated IEP meetings, preparing students for inclusive service delivery. Programs, such as the one at the University of South Florida, have designed their graduate SLP program to accommodate full-time school-based clinicians. Through distance

learning and mentorship from practicing SLPs, students earn their degrees while serving in schools that might otherwise lack access to speech-language services. This benefits schools that might otherwise lack SLPs and addresses the shortage of SLPs. The program is available in multiple counties in southern Florida, therefore reaching a broader community by offering this option. ASHA's (n.d.-f) *Grow Your Own School-Based SLP* also reflects this model, enabling universities to partner with their SEA or LEA so preservice students can work in schools, earn tuition support, and gain direct classroom experience.

**Outcomes at the State Level.** SEAs can play a central role in strengthening collaboration among SLPs, special education professionals, and classroom teachers by leveraging federally funded grants and supporting partnerships between school systems and universities. Funding outcomes include an increase in the number of states applying for and receiving OSEP or related grants that prioritize SLP-focused training, with SEA allocations supporting district-level pilot programs in classroom-based service delivery. These grants help build programs that demonstrate practical, collaborative approaches between SLPs, teachers, and special educators. Grant-funded initiatives, such as those obtained through SPDG or OSEP, should prioritize specialized training in classroom-based service delivery and collaborative methods. While forthcoming reciprocity agreements in state licensure will benefit many SLPs, states must continue to emphasize the need for additional training to obtain the license. Currently, states set their own licensure qualifications, so we need to initiate greater changes for consistent qualifications at the national level.

IHEs play a vital role in preparing future SLPs for collaborative, classroom-based service delivery. Outcomes at this level include updated coursework and practicum opportunities that integrate interprofessional collaboration and classroom-based models into preservice training.

Partnerships between IHEs and SEAs help build collaborative grant-funded programs that provide mentorship, tuition support, and applied training in local schools. In addition, university research can generate evidence to guide best practices in classroom-based service delivery, helping to align research-to-practice efforts and improve outcomes for students with high-incidence language needs. These actions by IHEs ensure that SLPs enter the workforce trained with the skills for classroom-based delivery, foundational research knowledge, and the collaborative mindset needed to work in inclusive classroom environments.

**Table 6**

*State Level Benchmarks and Outcomes*

Benchmarks	Possible Outcomes
Licensing	
Increase the number of states revising licensure requirements to include specialized training through coursework or exams for school-based SLPs.	A greater level of classroom-based service readiness of SLPs entering schools is evidenced by reduced need for on-the-job training.
Professional Development	
Increase the number of states implementing SPDGs or similar grant-funded programs with a classroom-based collaboration focus.	Increased percentage of school-based SLPs trained in collaborative classroom-based models.
Funding	
Increase the number of states applying for and receiving OSEP or related grants that include SLP-focused training components.	Documented growth in interprofessional collaboration practices (SLPs, teachers, special educators) in states receiving targeted funding
SEA distributes funding to states for districts to pilot classroom-based service delivery.	Districts launch model programs that demonstrate practicality and achievable outcomes.
Policy	

Increase the number of states issuing best practice memos or guidance documents specific to classroom-based service delivery.

Consistency in how SLP roles are described and supported in state education frameworks.

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IHE

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Graduate programs in speech-language pathology include coursework and practicum experiences that reflect classroom-based and collaborative service delivery.

SLPs enter schools with specialized training, districts adopt evidence-based collaborative practices, and students with language delays receive services in the LRE.

IHEs establish partnerships with local school districts to create practicum placements and mentorship opportunities in classroom-based service delivery.

Graduate students gain applied experience, while schools benefit from additional service capacity and opportunities to mentor future SLPs.

Universities develop and expand research that examines evidence-based practices in classroom-based service delivery and interprofessional collaboration.

Findings inform both state policy and district-level implementation, helping to align research-to-practice efforts and improve outcomes for students with high-incidence language needs.

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### ***District Level Action Priorities***

School districts within each state often set caseload size, disperse professional development funding, and allocate staffing resources. District decisions impact SLPs and the perceived ability to provide classroom-based services.

**Staffing.** School districts obtain their state’s funding formula appropriations and are then in charge of resource allocation. According to the *2024 ASHA Schools Survey (2024)*, the median caseload size across U.S. schools is 50 students, and urban and suburban districts reported larger caseloads. Currently, there are 29 states that have no minimum or maximum level for SLP caseloads (State by State Caseload, 2022). While districts attempt to maintain an average, the variation of population density in different districts and the allocation of SLPs impacts caseload

(or workload) as well as time for planning and collaboration. Neither individual states nor ASHA reports on the number of SLPs who work at multiple schools throughout a day or a week. This movement within a district and the irregular scheduling impacts planning and collaboration with all professionals, including other SLPs within the school. Movement towards classroom-based service delivery encourages districts to look at the impact of SLP allocation as it relates to caseload size, as well as the distribution of SLPs within the schools.

**Professional Development and Training.** Districts and large school systems support their SLPs by providing content-specific professional development. Effective professional development helps SLPs understand the importance of FAPE and the LRE, as well as the potential repercussions for the district, the school, and the SLP when these principles are not upheld (Green et al, 2019). Training on the current and emerging legal changes and requirements of special educators and how they impact the profession is vital for all IEP team members. Evans et al. (2025) found that all participants agreed that training that focuses on collaboration and classroom-based services for SLPs, teachers, and administrators is equally essential.

To build support for the dispersion of EBPs, districts can establish a mentorship program either through partnerships with their state organizations or local universities that pair trained SLPs and teachers with those who need additional support and guidance (ASHA, n.d.-e). By pairing those who are not confident in their skills or feel they have not had the training needed with those more experienced, the mentorship program encourages the use of collaboration and accelerates the shift towards using classroom-based services. Separate administrative PD should emphasize why collaboration is so crucial among their staff and how collaborative service delivery can be implemented effectively by SLPs and teachers (Carlin, 2022). In subsequent school years, districts should include collaboration-focused training in their yearly PD schedule

and eventually mandate the training as a precursor to employment. The interprofessional training within districts that includes both general and special education teachers builds the overall expectation of shared responsibility for classroom-based services to occur within the school (Green et al., 2019).

**Openness to Shifting Services.** Within a district, change must occur from multiple directions. Pfeiffer et al. (2019) reported that SLPs' most significant barrier was time constraints, so administrators should not only learn about implementing effective collaborative service delivery in their professional development but also design master schedules that include interprofessional co-planning time for SLPs, general education teachers, and special education teachers (DeLuca et al., 2023; Green et al., 2019). These schedules ensure structured opportunities for collaboration across disciplines. Administrators and district-level special education leaders can also collaborate with special education teams to build progress monitoring data forms with a classroom-based service delivery focus. Districtwide data tracking systems that monitor IEP service location will help leaders focus on where services occur and changes that occur over time. Other electronic changes may be to the electronic IEP platforms used by all employees in the district, with the addition of a 'note' section or pull-downs that focus on collaboration or classroom-based services (Katz et al., 2010). Finally, job descriptions and qualifications for SLPs should reflect the need for collaborative skills and training in classroom-based service delivery (DeLuca et al., 2023; Green et al., 2019; Havlovick et al., 2025).

**Outcomes at the District Level.** Change at the district level is a reflection of state mandates and the needs of individual schools. Districts must prioritize resource allocation, focusing on equitable distribution of SLPs and the maintenance of manageable caseloads to allow time for collaboration and planning. Professional development offered by the state or part

of the district initiatives is vital to building interprofessional collaboration among all team members. Districts can also strengthen outcomes by creating mentorship programs that pair experienced SLPs and teachers with new staff, enabling district leaders to observe and monitor changes that are occurring or identify areas that need more support. Because elementary and secondary schools operate on different scheduling structures, districts should design collaborative planning opportunities within the school day. The addition of collaboration blocks, along with grade-level and departmental common planning times, allows SLPs and special educators to join the meetings for natural planning opportunities and ensures it will happen consistently, as it occurs during the school day.

**Table 7**

*District Level Benchmarks and Outcomes*

Benchmarks	Possible Outcomes
Staffing	
Districts establish caseload guidelines aligned with ASHA recommendations (e.g., a median of 40–50 students per SLP) and regularly monitor caseload distribution across schools.	Caseload and workload balancing across districts allows SLPs to dedicate more time to collaboration, planning, and classroom-based interventions.
Professional Development and Training	
Districts implement mandatory professional development in collaborative, classroom-based service delivery, with participation tracked annually.	Measurable growth in interprofessional collaborative service delivery, reflected in district surveys and IEP service location.
Openness to Shifting Services	
Districts implement a mentorship pairing program for all new hire SLPs with a trained mentor from the district or local university.	Growth in confidence and the provided amount of collaborative service delivery, as reflected in observations and surveys of mentees.

Districts work with schools to increase the percentage of district master schedules that include protected interprofessional co-planning time.

Increased number of IEP service minutes delivered in classroom-based settings, as reflected in district-level data tracking.

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### ***School Level Priorities***

SLPs who choose to work in schools following graduation focus on speech sound, language, voice, and fluency disorders. Their language knowledge includes receptive, expressive, and pragmatic language, with specific knowledge and skills working on semantics, discourse, syntax, word finding, pragmatics, and verbal learning. This specialized language education gives SLPs a unique set of skills to use with their high-incidence language students. In addition to supporting students with communication disorders, SLPs bring expertise that benefits all students in a classroom. Their knowledge of language structure, vocabulary development, and communication strategies helps educate the overall learning environment, benefiting both students with identified language disorders as well as their non-disabled peers. However, sustaining a classroom-based focus requires IEP changes (DeLuca et al, 2023), consistent administrative support (Green et al., 2019), ongoing training for SLPs and teachers, dedicated collaboration and planning time for SLPs and their teacher counterparts, and a broader cultural shift within schools (Brimo & Huffman, 2023).

**Cultural Shift.** A cultural shift does not come quickly, but it should be a priority within all schools. The SLP-teacher partnership exposes students in those classrooms to a more language-focused environment. Data from these collaborative experiences can guide other teachers to join the partnership and broaden services throughout the school. As IEPs change to provide more services within the inclusive classroom and document positive results in students' academic and social achievement, feedback from parents will play a crucial role in the process,

ensuring that families actively engage in the shift (ASHA, 2024). Data collected from the SLP, teachers, and parents will help build future partnerships within the school and help the SLP advocate for the resources and organizational changes needed. For this shift to succeed, SLPs, educators, and administrators must move beyond traditional notions of what therapy looks like by transitioning from pull-out sessions to collaborative, classroom-based practices when this approach best meets a student's needs. Collaborative buy-in starts with focusing on the needs of the whole child, maintaining flexibility, and building a pathway of open communication (Ritzman, 2006). Collaboration requires shared decision-making among all members of the team, which can include members from the entire school community (ASHA, 2016). For classroom-based learning to be successful, the team must understand that the purpose and value is that the student's progress is the central goal. Maintaining a student-centered focus ensures teams maintain flexibility and open communication for their students.

**Training and Information Sessions.** The district initiated the training process, but it is up to the schools to provide ongoing training for their SLPs, teachers, and parents. Brimo and Huffman (2023) found that insufficient training led to a lack of clarity on professionals' roles and responsibilities. To address this, schools should designate a trainer to work with the staff to ensure consistency in the information presented to all staff members. Trainers may be SLPs or teachers who took part in the district mentorship program as SLPs available to offer support to each other, which contributes to overall increased job satisfaction. (ASHA, n.d.-e; Katz et al., 2010). At the school level, they can support teachers who need further guidance throughout the year, familiarize new hires who join the staff mid-year, and help staff build on their prior knowledge throughout the year (Willard & Kelley, 2025). These trainers, in collaboration with other SLPs and special education staff, can also provide informational sessions for parents of

students with IEPs. Farber & Goldstein (1998) remind SLPs that parents want to be active participants in their child's education, so offering parents advanced information allows parents to understand what collaborative classroom services will look like, reflect on their child's current services, and come to IEP meetings better prepared to engage in discussion. Additionally, schools should offer informational sessions to all parents whose children are in co-taught classrooms, ensuring that families understand the collaborative approach and its benefits. When parents understand how classroom-based services can support their child's language development, they become greater advocates for what they know will be the most effective services to meet their child's needs.

**SLP-Teacher Collaboration/Planning Time.** Heilman et al. (2024) found that collaborative teaching environments were associated with greater student success and that working collaboratively with a teammate fostered professional growth. One way to build successful collaboration within a school is through a teacher–SLP partnership plan (Stehle Wallace et al., 2021). These plans pair one SLP with one teacher and begin with a commitment to collaborate on at least one lesson per month. Partnership plans highlight the value of having an SLP in the classroom, show the ease or challenges in scheduling planning time, and the ability for both the SLP and teacher to begin learning each other's roles and figuring out responsibilities in the classroom setting (Stehle Wallace et al., 2021). Initial efforts by those trained in collaborative classroom services allow the SLP and teacher to gather data on scheduling and planning to present to administration, provide observation opportunities for colleagues, and support the movement towards carryover of services in a more natural environment (Carlin, 2022). Administration can further strengthen collaboration by employing a schedule with built-in

collaboration time and focused planning blocks that include special education teachers and SLPs (Carlin, 2022; Pfeiffer et al., 2019).

**Administration.** Administrators are vital to the success of interprofessional collaboration within their schools. Carlin (2022) found that SLPs and administrators shared an understanding of the value of administrative support for collaboration. Their support often takes the form of adjustments to the master schedule and the creation of common planning time that includes special educators and SLPs. District-provided training gives administrators a stronger understanding of the effectiveness of classroom-based service delivery and why it is important. This knowledge will help in IEP meetings when parents have questions or concerns and strengthen their ability to evaluate teachers during collaborative lessons. When administrators are performing yearly evaluations or supporting staff with their professional goals, recognizing the importance of building their collaboration skills is crucial (Carlin, 2022). Administrators must evaluate with reliability when they ask for an evaluation using classroom-based collaborative services or when they have questions about its implementation.

**Parental Involvement.** Parents play a critical role in the implementation and success of collaborative, classroom-based service. As they are their child's advocates, parents deserve clear and consistent communication throughout the special education process and about their child's education (Farber & Goldstein, 1998). During IEP meetings, it is critical to allow parents and guardians to see documented changes and receive clear explanations of what services will look like in the classroom. Parents may have received prior pull-out therapy, which did not meet their child's needs, or previous therapy that did not provide results. They also may have heard their child express a desire to stay in the classroom rather than being removed for services. These preferences should be honored and taken into consideration when designing speech and language

service times and locations on the IEP. The addition of ongoing training, a parent-network system, creating a space for parent feedback, along with addressing concerns through transparent conversations, is essential to building and sustaining strong parent-school partnerships (Farber & Goldstein, 1998).

**Outcomes at the School Level.** Although schools represent the smallest level of the system, they hold the greatest importance for students. Changes across the five key areas, cultural shift, training, collaboration, administrative support, and parental involvement, will help school employees, administrators, parents, and, most importantly, students. IEP modifications will allow more students to remain in the classroom, benefiting from increased access to peer interaction, academic instruction, and natural opportunities for language generalization. As parents increase their knowledge and gain a better understanding of collaborative service delivery models, they can have more informed and meaningful IEP discussions as well as better support their child. Ongoing training allows teachers and administrators to have meaningful discussions about planning and scheduling, while also integrating classroom-based services into professional evaluations. As a result, school and district IEP data will reflect a higher percentage of speech and language students receiving services in the classroom. Teachers benefit from SLP expertise in their classrooms, gaining new strategies to support all students' language and learning needs, and lessons delivered in natural settings promote stronger carryover and generalization. Ultimately, these changes at the school level will bring a stronger collaborative culture and ensure students receive meaningful and effective support in their classroom environment.

**Table 8*****School Level Benchmarks and Outcomes***

Benchmarks	Possible Outcomes
<b>Cultural Shift</b>	
Schools begin implementing strategies that build collaborative buy-in from teachers, administrators, and parents.	Teachers, administrators, and parents develop a clearer understanding of how SLP services fit into the classroom, and students experience more language-focused classroom environments that support their learning and communication needs.
<b>Training</b>	
Schools implement a system for ongoing training for all staff that builds on district initiatives.	Staff demonstrate a clearer understanding of their roles and responsibilities in collaborative service delivery.
<b>Collaboration/Planning Time</b>	
Schools establish written teacher–SLP partnership plans, ensure that each pair collaborates on at least one lesson per month, and provide observation opportunities for colleagues to see classroom-based services in action.	Schools report increased staff buy-in for collaboration, smoother integration of speech-language goals into classroom instruction, and observable improvements in student participation in co-taught classes.
<b>Administration</b>	
Administrators complete professional development on collaborative classroom-based services (CCBS) and interprofessional collaboration.	Administrators provide support during IEP meetings and incorporate CCBS into teacher evaluations.
<b>Parental Involvement</b>	
SLPs and IEP teams give parents and guardians increased clarity about the provision of services in the classroom through informational sessions and during IEP meetings.	Parents and guardians demonstrate greater understanding of collaborative service delivery models.

## ***Conclusion***

This plan synthesizes research that covers the barriers that impede SLPs from classroom-based service delivery that fully support students of high-incidence disabilities with speech and language goals, rights to FAPE in the LRE. Using Kotter's (1996) *8 Step Process for Leading Change*, this plan follows a framework of connected steps, some sequential, some overlapping, to guide change across multiple levels. After examining these barriers, the plan focused on two critical elements of the change process: creating a sense of urgency and developing a shared vision through the formation of a guiding coalition. These elements serve as the foundation for change across multiple organizational levels that impact the SLP-student interactions. The proposed product is the necessary action to form a powerful coalition of visionaries through direct person-to-person communication at the school, district, state, and national levels.

At the national level, change comes from major organizations that prioritize the overall needs of SLPs. The goal at this level is to provide the necessary national support that will stimulate the state-level organizations to respond. As this is where the most critical level of overall shift will happen, one crucial change action (such as a licensure change) can trigger a domino effect of subsequent events. At the state level, change is already happening with licensure, but consistency across states is still lacking. Increased focus on classroom-based service delivery in their funding and professional development will help ensure school-based SLPs across states provide effective services in the LRE. Universities play a critical role in this process by being the primary source of research that supports and expands the science of the SLP profession's EBPs, evidence-based programs and models, by partnering with SEAs and LEAs, but also by training graduate students in collaborative skills who can then mentor other SLPs as they move into their careers. At the district level, leaders must prioritize resource allocation to

support SLPs in implementing classroom-based services, which requires collaboration with administration, professional development opportunities, and their support of SLPs who want to ensure that their delivery of FAPE is happening at all schools across the district. Finally, at the school level, students remain the central priority. All the work done at the other levels of organization must ultimately support the SLP's ability to deliver classroom-based services that support educational outcomes and long-term growth for students. Once schools reach this stage, barriers begin to crumble, allowing SLPs to focus on implementing effective, evidence-based practices that benefit all students. Together, this multi-level approach creates a roadmap for change, allows for the removal of barriers, and moves SLPs into a better position to deliver services that guarantee FAPE and LRE.

#### **Section 4: Summary of Results**

This Capstone investigated the underuse of classroom-based service delivery models by school-based SLPs who work with high-incidence language disabilities. This investigation revealed how the underuse of classroom-based services affects students' access to the two guarantees of IDEA: FAPE and LRE. Specifically, it examined how service delivery decisions can either support or limit a student's ability to receive services in the settings that best comply with these legal mandates. Two research questions and three sub-questions focused on the EBP models currently being used and the barriers that impede the use of a more classroom-based service delivery model driven by the IEP that leads to FAPE and LRE. The primary barriers discussed in the research questions focused on administrative actions, factors influencing service delivery decisions, and gaps in preservice and professional training. While this Capstone emphasizes students with high-incidence language disabilities, the development of collaborative relationships between SLPs, general education teachers, and special education teachers also strengthens the support for students with more significant needs, such as students with autism and those who use AAC devices. Interprofessional partnerships allow for more opportunities for shared expertise, ensuring that students with more complex needs have access to FAPE and the delivery of services in the LRE.

Findings from the literature review showed only three research studies that support the effectiveness of the classroom-based service delivery model. However, the overall amount of research in this area remains limited. Archibald (2017) specifically alerts its readers to the scarcity of studies on school-based SLP delivery models, pointing out a significant gap in evidence. The current research base shows the benefit and the effectiveness of classroom-based service delivery, as well as highlighting the urgent need for further investigative research. The

significant gap in research identified the bigger issue of the need for more classroom evidence-based programs for high-incidence language students.

Further studies helped provide an understanding of the barriers that impede SLPs from using more classroom-based service delivery models within their school. Organizational and administrative challenges, including scheduling, infrastructure, professional development, and administrative support, were identified (Carlin, 2022; Heilman et al., 2024; Pfeiffer et al., 2019). These challenges, along with weak collaborative relationships, impede the use of classroom-based service delivery. Additional factors that influence an SLP's choice of service delivery include caseload size, disability levels, and the roles, responsibilities, and relationship between the SLP and their collaborative teacher (Armstrong et al., 2023; Brandel, 2020; Brandel & Frome Loeb, 2011). Research by Brandel (2020) and Brandel and Frome Loeb (2011) found that caseload size was one of the SLPs' most significant barriers, regardless of a student's severity of disability. This challenge is further exacerbated by the national shortage of SLPs, as reported by ASHA (2024), Schools Survey. According to the survey, 78.5% of respondents reported that job openings for clinicians exceeded job seekers in their type of employment facility and geographic area (ASHA, 2024). This significant shortage of SLPs in parts of the United States directly impacts students with speech and language needs, particularly the high-incidence language students, where consistent accessibility to services is critical. General education, special education teachers, and parents are affected by the lack of SLP services and the delay or limited classroom-based interventions. Another challenge is that the federal government often mandates programs but only appropriates 10% of the funds that were promised, leaving a gap between the commitments of what was said and what resources schools actually receive. *“From its inception, IDEA authorized federal funding for 40 percent of average per-pupil spending nationwide to pay*

*a portion of what it costs to provide special education services. But since the law was enacted, the closest the federal government has come to reaching the 40 percent commitment was 18 percent in 2004-2006, and current funding is at less than 13 percent.*" (National Association of Elementary School Principals [NAESP], 2023). Almost all national, state, district, and school action priorities are affected by this continued shortfall in funding. Without adequate federal funding and support, states and districts must find their own ways to meet the needs of their students with disabilities.

Training was also seen as a critical factor, whether addressing gaps from a lack of training during graduate school or through professional development through in-services. A key finding from Heilman and Bertone (2021) and Poll and Hoffman (2024) was the importance of how practical training with a real-world application should be used over theoretical instruction, especially when supporting inclusive models. This finding highlights the urgency for collaboration between universities and LEAs to continue support for classroom-based service delivery.

Despite legislation mandating appropriate education for students with disabilities since 1975, pull-out services remain the primary model, as confirmed by the *2024 ASHA Schools Survey* (ASHA, 2024). There continues to be a lack of inclusion services for high-incidence language students, undermining both FAPE and LRE requirements of SLPs. Initial considerations focused on schools and districts as the primary levels where change was needed. However, once it became clear how all the barriers were connected, it was evident that larger organizational issues beyond direct service delivery also required attention. The author selected Kotter's (1996) leadership change framework to provide an organized framework for action recommendations. Section 3 of the Capstone addressed this systemic issue in a multi-level

organizational framework. There is not one program, training, or level of organization that can solve the problem, as it is a multi-system environment, and meaningful change requires SLPs to advocate across school, district, state, and national levels.

Section 3 of the Capstone focused on the critical next steps at the four levels of educational organization. The author identified the most critical and practical actions needed at each level—national, state, district, and school. Each section includes tables that summarize the actions required. At the national level, the most impactful critical change was presented as the possibility of establishing a “Board Certification in Classroom-Based Service Delivery in Schools”, expanding what ASHA currently has for stuttering, fluency, and child language. While this certification would require significant policy shifts, its downstream flow of effects on state licensures, university training programs, and school-based therapy would lead to significant changes in service delivery for students with language disabilities. A practical action found at the national and state levels involved prioritizing and expanding research focused on EBPs for high-incidence language students in the classroom.

At the state level, ASHA is in the process of taking critical action by building consistency in licensure across the United States. However, until all 50 states join the compact, SLPs will continue to face varying expectations depending on their location. The critical change will be for nationwide consistency in licensure, moving towards universal licensure standards across all states and territories. One practical action at the state level is to enhance community engagement by IHEs. When professors and university staff engage with their LEAs, they build relationships and mentorship opportunities. These partnerships can help support preservice training for university students, but they can also be beneficial for future research initiatives. A critical action at the district level will be to work with schools to increase the percentage of district master

schedules that include protected interprofessional co-planning time. General education, special education, and SLPs can utilize that time for collaborative needs. At the district level, a practical action will be to increase their professional development and implement a mentorship program to build the skills and confidence needed by SLPs to work more effectively in the classroom setting. At the school level, the critical action is for all schools to implement strategies that build collaboration buy-in. This allows both teachers and students to experience a more language-focused classroom environment. The practical action with the most significant impact at the school level will be the addition of built-in collaboration and planning time for SLPs and teachers to help with the smoother integration of speech and language services into the classroom.

Using Kotter's (1996) framework, the Capstone Product is the 'Informational Poster Presentation' and resource pamphlets for teachers and SLPs that will focus on building a sense of urgency and strengthening collaboration while addressing the multiple levels of organizational change described in the Section 3 plan. The author will present the informational poster at the school, district, state, and national levels to SLPs who share a school or district with the author, to OSACS, and at the ASHA 2026 National Convention. Accompanying the presentation will be informational resource pamphlets distributed at all four levels that represent a first step toward addressing this problem of practice. These resource sheets serve as both informational tools and calls to action, outlining level-specific strategies to help SLPs, teachers, and administrators better support students in inclusive classroom contexts.

This Capstone project emphasizes the importance of creating a sense of urgency across organizational structures and identifying needed changes across multiple levels to help overcome the barriers. The intended goal is to foster the growth of coalitions across the multiple levels of

organizations. Its greatest challenge lies in the broad scope of change it is addressing, the number of groups involved, and the challenge of motivating professionals to make the changes they need individually and collectively. Transforming service delivery is a major, multi-system endeavor that requires consistent and continuous commitment across all levels of education. It is common for people to resist changing established practices, as individuals and organizations may be uncomfortable with shifting their roles and responsibilities. Systemic change takes the work of many people over multiple years and requires persistent advocacy from all involved in order to change others' perspectives.

A significant limitation in this area is the lack of research on classroom-based service delivery models for those high-incidence language students working on receptive and expressive language skills. The lack of research leaves SLPs with limited guidance on EBPs and affects their progression towards using a classroom-based service delivery model. This gap shows an urgent need in the field, as without stronger research evidence, efforts to improve student outcomes, increase progress, and support students at an earlier age are limited. Expanding the research base on EBPs for classroom-based service delivery is essential to ensuring that all students with language impairments receive effective services in the LRE.

The question remains: what comes first, the research or the practice of classroom-based delivery? SLPs continue to rely on private organizations, state governments, and IHEs to guide their profession. Still, their number one priority must remain the students and what is best for them. Collaboration among SLPs, teachers, and administrators can help identify effective strategies, refine service delivery, and generate data that contribute to the growth of evidence-based practice. While they wait for the higher levels of leadership and policymaking to provide clear guidance, funding, and evidence, SLPs must continue to advocate for and implement

practices that best support student outcomes, with a focus on ensuring FAPE and delivering services in the LRE. By doing so, they not only meet their ethical responsibility to their students but also become an instigator for the change needed to bridge the gap between research and practice.

## Section 5: Product for Practitioners

The product for practitioners consists of two parts. The resulting product of this Capstone will be an informational poster presentation to ignite a sense of urgency (Kotter, 1996) in the field of speech-language pathology to significantly increase services that meet the *Andrew F.* definition for an appropriate, inclusive education in the LRE for our high-incidence language students (ASHA, 1996; Cirrin et al., 2010; Green et al., 2019). This Capstone product aims to build a coalition of “like-minded” professionals who will advocate for inclusive practices at the school level, continue by collaborating with peers at the district and state levels, and work towards partnering with their state speech-language hearing associations to help build change at the state and national levels. The informational poster will provide visuals for the accompanying presentation. Attendees who listen to the presentation or show interest in the poster will receive a resource pamphlet tailored to the specific groups (SLPs, teachers, administrators) participating in the presentation. An additional request was made by Tiffany White (twhite@asha.org), ASHA’s Senior Director of School Services in Speech-Language Pathology, who, following our meeting in May 2025, expressed interest in receiving the final product. She will receive a highlighted summary and critical elements of findings in a magazine format, along with copies of each resource pamphlet.

The poster consists of eight main sections. The problem of practice section will state the problem of practice along with the purpose of the study. A list of the five research questions will be in the next section. A third section specifies the barriers and limitations to providing classroom-based service delivery found within the articles, and next to that is a section focusing on the call to action that will directly relate to the resource pamphlets that the audience members will take away. The final four sections are the central point of the poster. The four sections

represent the multi-levels of national, state, district, and school. Each of the four sections lists its specific action-level priorities.

There will be five different resource pamphlets labeled ‘Action Steps for Change: Advancing Classroom-Based Speech-Language Services’, organized by the four levels of the educational organizational structure. As seen in Appendix E and Appendix F, there will be two school-level pamphlets, focused on SLPs and one for administrators and teachers. Appendix D shows the district-level pamphlet with an SLP focus. The state-level pamphlet in Appendix C also has an SLP focus. The final pamphlet, Appendix B, will be handed out at the ASHA conference in 2026. This pamphlet focuses on a broader audience for the general SLP population.

The products for practitioners aim to help school-based SLPs deepen their understanding and acquire knowledge about how each level of the education system -national, state, district, and school- impacts and shapes their ability to use classroom-based service delivery. This approach ensures that their high-incidence language students receive FAPE through services in the LRE. While school-based SLPs work primarily at the school level, higher-level organizational decisions and policies shape their practice. The goal of this product for practitioners, Action Steps for Change: Advancing Classroom-Based Speech-Language Services, is to create a sense of urgency for change and to build a coalition of professionals who recognize the underuse of classroom-based services and understand how initiatives at the local, district, state, and national levels can affect an SLP's model of service delivery. The professional-specific resource pamphlets will provide information on why action matters, the barriers at that level, action steps that SLPs can take, and ways to move forward. The information on the pamphlets aims to encourage and empower SLPs and other professionals to feel a sense of urgency so they

can engage in meaningful dialogue with colleagues, administrators, and district personnel. This information gives individuals the chance to be a part of guiding a coalition to make changes at every organizational level.

The informational poster and the resource pamphlets will be available at all five presentations. The information presented through both products will allow the author's knowledge and experience as an SLP to help show the urgency in moving forward but also relay the need to be positive and energetic when working together to build a coalition. These tools are intended to inspire others to join in the effort and make them want to actively participate in the change. Four presentations took place in the fall of 2025 for the teachers, school, district, and state levels (OSACS) (see Section 3, p. 86). The poster will be submitted and presented for the national-level presentation, which will occur at the 2026 ASHA National Convention. According to the ASHA Convention website, the 2025 poster presentation submission deadline was April 23, 2025, with notifications of acceptance or non-acceptance by July 16, 2025. Follow-up instructions for recording and uploading presentations for virtual attendees were sent on August 20, 2025. These dates offer a timeline to guide preparation and poster submission for the 2026 ASHA National Convention.

**Table 1***Literature Review Matrix*

<b>Focus</b>	<b>Author(s)</b>	<b>Stated Purpose</b>	<b>Research Questions</b>	<b>Participants</b>	<b>Design</b>	<b>Results</b>
Literature that describes interprofessional experiences between SLPs and classroom teachers.	Armstrong et al. (2023)	This mixed-methods systematic review aimed to synthesize existing literature to describe the experiences of Interprofessional Practice (IPP) between SLPs and classroom teachers (CT) in mainstream schools	Aim: to systematically search and synthesize the available evidence that explored the experiences of SLPs and CTs using IPP in an educational setting.	18 studies	Mixed Methods Systematic Review	Six main themes describing interprofessional experiences were identified: (1) What are you bringing to the collaboration table? (2) putting the value in collaboration, (3) sharing is collaborating, (4) the nature of collaboration varies, (5) the educational context matters, and (6) influences on collaboration beyond professional control. A core underpinning concept was the importance of establishing and maintaining collaborative relationships to enhance the IPP experience.
The influence of workplace, student, and self-characteristics that	Brandel & Frome Loeb (2011)	In this study, students, SLPs, and workplace characteristics that	1. What are the dominant factors that influence SLPs' recommendations to	1897 SLPs	Quantitative, non-experimental	SLPs reported that student characteristics, rather than SLP or workplace

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
impact an SLP's service recommendations.		may influence SLPs' recommendations were examined.	<p>their IEP teams regarding their students' program intensity and service delivery models for intervention?</p> <p>2. What factors within the student domain (i.e., severity, grade level, and disability) of the SIDM model are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload?</p> <p>3. What factors within the SLP domain of the SIDM model are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload?</p> <p>4. What factors within the workplace domain of the SIDM model</p>			<p>characteristics, were the factors they considered the most when making these recommendations. However, these same SLPs reported that current students on their caseload with severe to moderate disabilities participated in intervention 2–3 times a week for 20–30 minutes in groups outside of the classroom. Students with the least severe disability received intervention 1 time a week for 20–30 minutes in groups outside of the classroom.</p>

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			are associated with the SLPs' program intensity and service delivery model recommendations to the IEP team for students on their caseload?			
Factors that influence an SLP's choice for service delivery for students with language disorders.	Brandel (2020)	This study was built upon a previously published survey (Brandel & Loeb, 2011) to examine whether factors related to the place and time for services for students with language disorders had changed since the 2008 survey and to examine the differentiation of decisions made by the SLPs across the three severity levels.	1. Have factors related to the student, workload, or SLP changed in the past 9 years relative to where and for how long services are provided for students with language disorders? 2. Are the factors that impact SLPs different depending on the amount of differentiation reported in where and how long services are provided for students with mild, moderate, and severe language disorders?	439 SLPs	Quantitative	Similar to previous findings, students participated in services primarily in groups outside the classroom once or twice a week for 20–30 min. Factors that continued to impact decisions were the SLP's caseload and year of graduation. Related to the differentiation of decisions, most SLPs made two different decisions across the three severity levels for where and how long to provide services, while almost one-third made the same decision for the place.
A survey of the perceptions of SLPs	Brimo & Huffman (2023)	The purpose of this study was to	1. Do SLPs report using collaborative	87 SLPs	Mixed Methods	The majority of SLPs reported that they used a

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
and classroom teachers on their collaborative service delivery practices.		compare SLPs and teachers' perceptions of collaborative service delivery in a school setting.	service delivery models? 2. Do teachers report that SLPs are using collaborative service delivery models? 3. Is there a difference in how SLPs and teachers rate experiences with collaboration? 4. Is there a difference between SLPs' and teachers' identification of one another as collaborative partners? and 5. Is there a difference in SLPs' and teachers' identification of barriers to collaboration?	77 teachers		combination of collaborative and noncollaborative service delivery models. Teachers also reported that the SLP at their school used collaborative and noncollaborative service delivery models. When asked to report on their collaboration experience generally, teachers rated their experience with collaboration more positively than SLPs. Teachers also were not as likely to identify SLPs as collaborative partners when compared with SLPs who identified teachers as collaborative partners. Finally, teachers and SLPs reported similar barriers to implementing a collaborative service delivery model. However, SLPs identified roles and responsibilities and training on collaboration as barriers to collaboration more than teachers.

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
Finding out if the perceptions of SLPs and principals are similar or different when asked about classroom-based services	Carlin (2022)	The purpose of this study was to compare elementary principals' and SLPs' perceptions of integrated classroom-based services (ICBS).	Investigate elementary principals' and SLPs' perceptions of ICBS in the public-school setting and 2. compare perception data in three areas: (a) effectiveness and specific benefits of ICBS, (b) impact of the SLP–teacher relationship on the successful implementation of ICBS, and (c) the need for administrative support with time management and school resources.	210 SLPs 89 Principals	Mixed Methods	The results showed that SLPs and principals held similar perceptions about the overall effectiveness of ICBS, the need for a positive SLP–teacher relationship, the importance of adequate administrative support, and several key benefits. Differences occurred on statements related to targeting speech goals, behavior management, student grouping, and data collection.
Finding experiences and perceptions of SLPs on collaboration through existing research	Evans et al. (2025)	This systematic review sought to synthesize existing empirical evidence on collaborative perceptions and experiences in research that included school-based SLPs.	1. How are researchers investigating school-based SLPs' collaborative perceptions and experiences (e.g., design, participants, purpose, definition of collaboration, targeted collaborative activity)? 2. How do school-based	26 studies	Systematic literature review	The results were synthesized by identifying the main findings and similar themes across studies. The main findings from the systematic review were (a) purpose, definitions, and collaborative activities; (b) perceptions of collaboration; (c) engagement in collaboration; (d)

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			SLPs describe their perceptions and experiences related to collaboration in U.S. K–12 schools?			facilitators and barriers; (e) collaboration and telepractice; and (f) differing findings based on demographic factors.
The assessment and evaluation of the effectiveness of collaborative intervention in the first years of formal education.	Farber & Klein (1999)	The purpose of Maximizing Academic Growth by Improving Communication (MAGIC) was to identify Kindergarten and first grade students with language-learning difficulties and develop a series of support programs to increase teacher-therapist collaborative intervention, increase parental support, and improve students' performances using cross-age peer tutors	None. Goals: To improve literacy by facilitating increased oral language, vocabulary development, and appropriate syntax and semantics. To encourage higher levels of thinking. To improve communication skills within the classroom curriculum.	552 Kindergarten and 1 <sup>st</sup> graders	Quantitative	Results indicated that weekly classroom intervention resulted in significantly higher scores on the subtests of listening and writing for the children involved in the MAGIC program. Students in the treatment groups demonstrated significantly higher abilities in understanding vocabulary and cognitive-linguistic concepts in addition to increased writing skill development for producing relevant sentences with correct mechanics and spelling.
A survey of SLPs to see what influences their use of and perceptions of inclusion	Green et al. (2019)	In the current study, public school clinicians' use, and perceptions of inclusion were examined to better understand potential	1. What does training in and implementation of inclusion services look like for the surveyed SLPs? 2. What are the surveyed school-	344 SLPs	Mixed Methods	The results showed that over half of the respondents served 1%–25% of their caseload through an inclusion model, and it was most frequently utilized to address language and

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
		influences on its implementation.	based SLPs' perceptions with regard to both positive and potentially challenging aspects of the inclusion service delivery model? 3. Are use and perceptions of inclusion predicted by lack of training in an inclusion model, caseload size, teacher factors, and administrative support, or related to school setting? 4. What are SLPs' most frequently reported open-ended responses to "things they like about the inclusion model," "challenges faced when providing inclusion services," and "the most important keys to success for implementing classroom-based services"?			social skills. Perceptions reported that over 60% reported that inclusion was not effective for most of their caseload. Predictive factors included teacher collaboration and planning time as the two most frequently reported keys to inclusion success and were also two of the most frequently reported challenges to implementation. Lack of training was not a predictor of use of classroom-based services.
A survey to find the perceived needs of SLPs regarding training	Heilmann & Bertone (2021)	The purpose is to identify school-based SLPs' needs in the areas of	1. To identify perceived preservice training needs for future	145 SLPs	Mixed Methods	During preservice training, respondents most valued the applied aspects of their training.

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
preparedness, future training, and research		training and research to support school-based practice	school-based SLPs. 2. To identify perceived PD needs for SLPs working in the schools, both general needs and needs of SLPs transitioning into school-based practice; and 3. To identify gaps in research that support school-based practice.			Respondents noted that early-career SLPs require significant support, particularly with the professional responsibilities of school-based practice (e.g., individualized education programs, interprofessional practice, and scheduling). When describing general professional development and research needs, the respondents placed high value on practical topics that have clear implications for school-based practice.
Developing educationally relevant IEPs with the use of inclusive service delivery	Heilmann et al. (2024)	In this clinical focus article, we will demonstrate how the inclusive practice service delivery model can assist SLPs with the development of educationally relevant IEPs.	1. Assessing present levels of academic and functional performance: How do SLPs with an inclusive mindset approach speech and language assessments? 2. Determining the effects of the disability on academic achievement and functional performance: How	12 SLPs	Deductive Qualitative Analysis	The study provided practical examples of using curriculum-based assessments and academic standards to gauge students' present levels of academic and functional performance. Next, they described how engaging with the school community and observing students in the educational environment assists with determining the effects of a student's disability on academic

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			<p>does SLPs' experience supporting general education content and engaging in general education contexts promote an understanding of students' educational and social needs and the development of goals to increase access, engagement, and progress in the general education curriculum, instruction, and environments? 3. Aligning services to meet student needs: How do collaborative SLPs approach placement decisions and integrate services with other educators?</p>			<p>achievement and functional performance. They concluded by describing how an inclusive mindset helps to align services to meet students' needs, noting that those IEPs promote students' access, engagement, and progress in age or grade-level curriculum, instruction, and environments by highlighting the impact of a disability on academic achievement and functional performance.</p>
<p>To determine if a pilot program on collaborative classroom-based therapy between graduate students and a local school is effective</p>	<p>Koutsoftas et al. (2018)</p>	<p>This article reports on the development of a university/school district partnership to augment speech and language therapy services provided to</p>	<p>1. What was the frequency and type of training provided to stakeholders, and what was the quality of the training? 2. Were all associated parties properly informed</p>	<p>3 SLP graduate students</p>	<p>Mixed Methods</p>	<p>Triangulation of the three data sources (structured interviews of program stakeholders, a quantitative survey of classroom teachers for whom a speech-language pathology student collaborated in the</p>

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
		schoolchildren in the partner district, while providing graduate students in speech-language pathology a unique clinical experience.	of the program expectations and classroom-based intervention services? 3. What is the satisfaction level of the stakeholders and associated parties of the program?			classroom, and descriptive data about graduate student activities and schoolchildren receiving speech and language services) indicated that implementation of the pilot program was successful. Possible modifications to be made in the 2nd year of the program, including longer rotations and level of supervision, were also added.
See if students in a collaboratively taught classroom score higher than those in comparison conditions on vocabulary assessments.	Mitchell et al. (2022)	The purpose of this study was to investigate the effects of a vocabulary intervention delivered by teachers collaborating with SLPs in the classroom as compared with teachers in a noncollaborating condition.	When SLPs and teachers implement a vocabulary instructional technique using a systematic collaboration protocol (treatment condition), is there a significant difference in third-grade students' vocabulary knowledge, as measured by three researcher-created tasks, when compared with the scores of students in classrooms where non-collaborating	68 third-grade students	Quasi experimental	A significant interaction effect on the Words-in-Context (WIC) task supported the value-added impact of having the SLP collaborate directly with the teacher in implementing the approach. Gains on the Synonyms and Non-Example measures were not significantly different between the conditions, but large effects were found for all three tasks within the collaboration condition, whereas gains in the comparison condition showed large effects for the Synonyms

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			teachers implement a similar technique solo (comparison condition)?			task only and medium effects for the WIC and Non-Example tasks.
A survey focusing on factors predicting the use of IPP and the barriers to using collaboration.	Pfeiffer et al. (2019)	This study examined the models of collaboration used by school-based SLPs during the provision of special education services, including factors predicting the use of the IPP model and barriers to collaboration.	<p>1. To what extent do factors such as caseload size, years of experience, and prior training in collaboration predict SLP engagement in multidisciplinary, interdisciplinary, and interprofessional behaviors relative to special education initial evaluations?</p> <p>2. To what extent do factors such as caseload size, years of experience, and prior training in collaboration with other professionals predict SLP engagement in multidisciplinary, interdisciplinary, and interprofessional behaviors relative to intervention?</p> <p>3. What are the barriers to engagement in</p>	474 SLPs	Quantitative	Results demonstrated low percentages of school-based SLPs engaging in IPP during initial evaluations (8%), eligibility meetings (43%), and intervention sessions (14%). Three factors predicted the use of IPP in schools: prior training in collaboration, years of experience, and educational setting. The most frequently cited barriers to SLPs' engagement in collaboration included time constraints/scheduling (48%), resistance from other professionals (23%), and lack of support from employers/administration (11%).

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
A survey focusing on elementary school SLPs' knowledge about collaborative classroom-based services.	Pfeiffer et al. (2025)	The purpose of this national survey study was to assess K–5 school-based SLPs' perceived knowledge, training, support, and experiences related to collaborative language and literacy instruction with general education teachers.	collaboration by school-based SLPs?  1. What perceived knowledge do SLPs report having about collaborative language and literacy instruction? Is this perceived knowledge correlated with years of experience working as a school-based SLP, years of experience working in their current school, or self-reported frequency of providing collaborative language and literacy instruction with general education teachers? 2. What IPE training do SLPs report having related to collaborative language and literacy instruction? Does the timing of the training impact SLPs' self-efficacy for engaging in collaborative	167 SLPs	Quantitative	There are four main findings from the current study: (a) SLPs perceived to be the most knowledgeable about collaborating with teachers during development of an Individualized Education Program and least knowledgeable about implementing collaborative instruction in the general education classroom; (b) most participants reported receiving in-service training, but the timing of training (pre-service vs. in-service) was not correlated with perceived knowledge; (c) the majority of SLPs perceived support from principals and special education administrators, but only approximately 25% agreed that general education teachers think they should work with them to provide collaborative language and literacy instruction and have the knowledge

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			<p>language and literacy instruction?</p> <p>3. What are SLPs' perceptions of support from administrators and general education teachers for engaging in collaborative language and literacy instruction?</p> <p>4. What are SLPs' experiences with providing collaborative language and literacy instruction with general education teachers?</p>			<p>to do so; and (d) SLPs' perception of the general value of collaborative language and literacy instruction was correlated with their reported environmental support.</p>
<p>To explore preservice teachers' and SLPs' attitudes toward inclusive service delivery, and perceptions of their collaboration skills</p>	<p>Poll &amp; Hoffman (2024)</p>	<p>To assess the attitudes and perceptions of preservice teachers and SLPs toward inclusive education, IPP, and their confidence in working with children with language difficulties.</p>	<p>1. What are preservice teachers' and SLPs' attitudes toward promoting the language abilities of young children in the classroom setting?</p> <p>2. What are the perceptions of preservice teachers and SLPs toward collaboration with other professionals, and barriers to collaboration?</p> <p>3.</p>	<p>29 Pre-Surveys; 37 Post-Surveys (Out of 55 offered)</p>	<p>Convergent Mixed Methods</p>	<p>The quantitative findings from pre- to post-survey showed that attitudes towards promoting language did not change. Participants agreed more strongly that SLPs should participate in classroom activities and that professionals other than SLPs can assist in implementing language goals and help identify language difficulties in the classroom. Qualitative findings related to question 1 post</p>

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
To see what processes and considerations are needed to implement effective classroom-based therapy	Ritzman et al. (2006)	To explore how a school-based SLP implemented a classroom-based service delivery model that focused on collaborative practices in classroom settings.	<p>What are the perceptions of preservice teachers and SLPs of the roles of each profession when working with children with communication impairments, and of the skills required for collaboration?</p> <p>4. What are preservice teachers' and SLPs' perceptions of their own skills for collaboration and for working with children with communication impairments?</p> <p>1. How would you describe the process you have gone through to be able to serve students in the classroom setting?</p> <p>2. From your perspective, what are the ongoing considerations as you collaborate and implement inclusive practices?</p> <p>3. What information do SLPs need to</p>	1 SLP	Ethnographic examination	<p>survey showed that there was more focus on SLP practices as part of classroom activities. Question 2 post survey answers identified barriers focusing on caseload, communication, and role-understanding. Question 3 post survey answers focused on the need to foster better communication, and question 4 answers focused on the participants' current skills to foster better communication between professionals.</p> <p>Through interviews and observation, five themes emerged: service delivery, curriculum-based intervention, scheduling, collaboration, and advocacy. Though the participant implemented a full range of service delivery models, the findings provide helpful ideas for others implementing inclusive and</p>

Focus	Author(s)	Stated Purpose	Research Questions	Participants	Design	Results
			<p>consider to successfully implement collaborative and inclusive speech–language services?</p> <p>4. How would you describe your intervention services as you co-teach in the classroom setting?</p> <p>5. How would you describe your reading classroom?</p> <p>6. What makes these service delivery models work for you?</p>			collaborative practices in classroom settings.
Investigating the growth of vocabulary skills for students who receive speech and language services, as well as those who do not receive services.	Throneburg et al. (2000)	To evaluate the progress of children receiving speech and language services when three different service delivery models are provided.	<p>1. Will the amount of service delivery make an impact on the post-test vocabulary scores?</p> <p>2. Will the location of services make an impact on the post-test vocabulary scores?</p>	177 Kindergarten through 3 <sup>rd</sup> graders	Experimental Study	The collaborative model was more effective for teaching vocabulary to students who qualified for speech or language services than a classroom-based model or a traditional pull-out model. The findings indicated that the collaborative and classroom-based models increased vocabulary skills to a significantly greater degree than receiving only regular instruction from the classroom teacher.

## Appendices


### Appendix A

#### Informational Poster

## Building Urgency for Classroom-Based Service Delivery:

### A Multi-Level Plan for SLPs

Joan M. Bade, Ed.D., CCC-SLP



Problem of Practice	The Multi-Level Action Priority Plan	
<p>Although students with a speech-language impairment have the right to FAPE and to receive services in the LRE, schools often struggle with implementation related to speech-language inclusive classroom services. Any student with high-incidence disabilities with IEP goals that focus on language has the right to an appropriate education, ensuring that they work on their receptive and expressive language goals in an environment most suited for success.</p> <p style="text-align: center;">Purpose: to investigate the underuse of classroom-based service delivery models by school-based SLPs</p>	<p style="text-align: center;"><i>National Level: Vision</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> ASHA Board Certification change</li> <li><input type="checkbox"/> Updated CCC-SLP that includes competencies in classroom-based service delivery</li> <li><input type="checkbox"/> Federal grants that focus on SLPs and classroom-based service delivery</li> <li><input type="checkbox"/> Expansion of State Personnel Development Grants (SPDG) and Technical Assistance Modules that focus on classroom-based service delivery</li> <li><input type="checkbox"/> Increased publication with a classroom-based service delivery emphasis</li> </ul>	<p style="text-align: center;"><i>State Level: Consistency</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Licensure consistency throughout the states that includes specialized school-based training</li> <li><input type="checkbox"/> Increase the number of states implementing SPDG or grant-funded programs focusing on classroom-based service delivery</li> <li><input type="checkbox"/> Increase the number of states applying for SPDG and other federal grants focused on classroom-based service delivery</li> <li><input type="checkbox"/> Consistency in how SLP roles are described in state education frameworks</li> <li><input type="checkbox"/> University Partnerships that include increased classroom-based training, updated research practices, and building relationships with the community and LEAs</li> </ul>
<p style="text-align: center;"><b>Research Questions</b></p> <p><b>RQ1.</b> What classroom-based service delivery models are supported by evidence-based research for the language goals of students with high-incidence disabilities?</p> <p><b>RQ2.</b> Why don't SLPs provide more classroom-based vs pull-out services for their students with language goals?</p> <p><b>RQ2a.</b> What administrative actions can support SLPs in providing services in the LRE?</p> <p><b>RQ2b.</b> What factors influence an SLP's choice of service delivery environment?</p> <p><b>RQ2c.</b> What training is needed for SLPs and teachers to provide more classroom-based service delivery?</p>	<p style="text-align: center;"><i>School Level: Implementation</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Implement strategies to build collaborative buy-in from teachers, administrators, and parents</li> <li><input type="checkbox"/> Ongoing trainings to add to district initiatives</li> <li><input type="checkbox"/> SLP-Teacher Partnership plans that focus on classroom-based service delivery implementation</li> <li><input type="checkbox"/> Administrators' complete professional development on interprofessional collaboration</li> <li><input type="checkbox"/> Increase parental understanding of classroom-based services and how they impact their child</li> </ul>	<p style="text-align: center;"><i>District Level: Resources</i></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Establish caseload guidelines and monitor distribution across schools</li> <li><input type="checkbox"/> Implement mandatory classroom-based service delivery professional development</li> <li><input type="checkbox"/> Establish a mentorship pairing program for new hires to accompany the professional development</li> </ul>
<p style="text-align: center;"><b>Barriers and Limitations</b></p>	<ul style="list-style-type: none"> <li>*Organizational *Administrative Support</li> <li>*Caseload Size *Scheduling and Planning</li> <li>*Lack of Training *Resistance to Change/ Lack of Willingness</li> <li>*The urgent need for research evidence on EBPs</li> </ul>	<p style="text-align: center;"><b>Call to Action</b></p> <ol style="list-style-type: none"> <li>1. SLPs need to advocate at every level of the system</li> <li>2. Knowledge is built through courses, professional development, and mentorship</li> <li>3. Classroom-based services are built through collaboration and planning</li> <li>4. The need for more research on evidence-based practices (EBPs) is vital to school-based SLPs</li> </ol>

Note: Poster Dimensions: 2.75 x 3.9 feet

## Appendix B

### National-Level Resource Pamphlet

#### Moving Forward

Actions at the national level impact all levels- start the vision here to better equip all school-based SLPs with the knowledge and skills needed in classroom-based service delivery in order to uphold FAPE and ensure services in the LRE

**Make the Cultural Shift**

•Urgency and a shared vision towards the use of classroom-based services start at the national level

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**Don't wait—small steps like co-planning one lesson starts a ripple effect to the use of more classroom based therapy.**

Useful Websites  
**Technical Assistance Centers**  
<https://www.ed.gov/about/ed-office/s/oese/oese-technical-assistance-centers>  
**OSEP**  
<https://www.ed.gov/about/ed-office/s/osers/osep>

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**GET STARTED**



Collaboration creates stronger outcomes for students with language needs

#### Action Steps for Change: Advancing Classroom-Based Speech-Language Services at the National Level

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#### Why Change is Needed

**Why It Matters**


National policy influences what SLPs do at the state, district, and state levels

The IDEA ensures FAPE and LRE for every student, yet classroom-based services are still inconsistently applied to uphold these assurances

**Benefits of Classroom-Based Delivery**

Natural Learning Environment  
 Less disruption from classroom activities

Skill carryover and generalization



#### Barriers at the National Level

**What Gets in the Way**

Limited research grants related to classroom-based service delivery


The pace of policy change at the federal level

Length of time between research and publication of articles on Evidence Based Practices

Federal funding for resources and programs

Extent and coverage of published research on evidence-based practices for classroom-based service delivery

**Collaboration benefits both students and teachers**



#### Practical Action Steps

**What Can be Done Now**

Spotlight classroom-based service models in national journals

Advocate for a new board certification for school-based SLPs related to classroom-based service delivery

Promote altering the terminology to "SLP" in federal grants to foster a more targeted emphasis than "related service."

Continued classes, programs, toolkits, and advocacy guidance offered by national organizations to aide SLPs in building their classroom-based service delivery skills

## Appendix C

### State-Level Resource Pamphlet


#### Moving Forward

Advocate for state licensure boards to include competencies related to classroom-based service delivery.

Encourage state departments of education to provide grants for pilot programs that focus on classroom-based models.

**Make the Cultural Shift**  
States are a critical link between policy and practice. Changes in licensure and training will lead to stronger collaborative skills in SLPs

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**Don't wait—small steps like attending a training on collaboration starts a ripple effect to the use of more classroom-based therapy.**

Useful Websites  
*State Licensure Information*  
<https://www.speechpathologygraduateprograms.org/state-licensing-overview/>

*Example of University-Community Partnership*  
<https://www.pacificu.edu/speech-language-pathology-ms/curriculum/community-based-model-clinical-education>

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Collaboration creates stronger outcomes for students with language needs

#### Action Steps for Change: Advancing Classroom-Based Speech-Language Services at the State Level

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#### Why Change is Needed

##### Why It Matters

States regulate licensure and certification requirements for SLPs

Consistency in licensure across states impacts mobility and training standards for SLPs

States help bridge the gap between federal policy and local schools




#### Barriers at the State Level

##### What Gets in the Way

- Variability of requirements in licensure across states
- Lack of emphasis on classroom-based service delivery during graduate school practicums
- Lack of state-wide professional development targeted at classroom-based service delivery models
- Variability of best practice memos or guidance documents describing an SLPs role
- Limited research on classroom-based service delivery from universities

**Collaboration benefits both students and teachers**



#### Practical Action Steps

##### What You Can Do Now

- Support state-wide professional development initiatives
- Advocate for funding of pilot programs for mentorship focusing on classroom-based service delivery
- Advocate with your district or school to partner with local universities to allow for graduate school practicums in classroom-based service delivery
- Get involved in state-level speech-language hearing organizations to advocate for changes

## Appendix D

### District-Level Resource Pamphlet


### Moving Forward

Create district-wide workload and/or caseload caps to balance student needs with SLP availability.

Encourage district-wide collaboration among SLPs to promote professional learning among peers.

**Make the Cultural Shift**  
By balancing caseloads, supporting training, and building mentorship programs, districts can make classroom-based service delivery possible


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**Don't wait—small steps like collaborating for one lesson starts a ripple effect to the use of more classroom based therapy.**

Useful Websites  
*Taking Data*  
<https://www.speechandlanguagekids.com/data-collection-ideas-for-speech-therapists/>  
*Supporting and Mentoring New SLPs*  
<https://www.speechandlanguagekids.com/6-creative-ways-to-support-new-slps-on-your-team/?utm>

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Collaboration creates stronger outcomes for students with language needs

### Action Steps for Change: Advancing Classroom-Based Speech-Language Services at the District Level

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### Why Change is Needed

**Why It Matters**

Districts control staffing and resources.

Professional development and mentorship opportunities often start at the district level.

District initiatives help guide schools schedules and activities and can affect inclusive service delivery.



### Barriers at the District Level

**What Gets in the Way**

Heavy caseloads can make collaboration difficult

Inconsistent administrative support across schools within the district


Inability to hold monthly focused collaboration with district SLPs.

Lack of structured planning time between teachers and SLPs

Inconsistent or irrelevant trainings

Teacher, administrator, and SLP willingness to work together to provide classroom-based services

**Collaboration benefits both students and teachers**



### Practical Action Steps

**What You Can Do Now**

Use data collection to demonstrate student growth in classroom-based services

Share success stories to district leaders to show how classroom-based services benefit students

Build mentorship programs to support new SLPs in using classroom-based service delivery

Advocate for district-wide professional development on classroom-based models

## Appendix E

### School-Level Resource Pamphlet

### Moving Forward


Teachers and SLPs can integrate language based inclusive practices into daily routines

Provide parents with clear explanations about classroom-based services to improve their understanding of how collaboration supports their child's access to FAPE in the LRE

**Make the Cultural Shift**

- Lasting change starts in the classroom
- Create inclusive environments with embedded language supports

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**Don't wait—small steps like co-planning one lesson starts a ripple effect to the use of more classroom based therapy.**

**Helpful Websites:**

*Implementing Service Delivery Models in Schools*  
[bit.ly/3W3E7Cl](https://bit.ly/3W3E7Cl)

*Supporting and Mentoring New SLPs*  
<https://www.speechandlanguagekids.com/6-creative-ways-to-support-new-slps-on-your-team/?utm>

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**GET STARTED**

Collaboration creates stronger outcomes for students with language needs

### Action Steps for Change: Advancing Classroom-Based Speech-Language Services at the School Level

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### Why Change is Needed

**Why it Matters**


Many SLPs still rely on pull-out services

Students with high incidence language disabilities risk reduced access to FAPE and services in the LRE

Research supports the benefits of classroom-based services, but adoption has been slow

**Benefits of Classroom-Based Delivery**

- Natural Learning Environment
- Less disruption from classroom activities
- Skill carryover and generalization




### Barriers at the School Level

**What Gets in the Way**

- Limited time for collaboration with teachers
- Scheduling conflicts with general education teachers
- Lack of planning time
- Heavy caseloads or workloads
- Lack of shared vision between SLPs, teachers, and administrators
- Minimal or no training on collaboration for SLPs and teachers

**Collaboration benefits both students and teachers**



### Practical Action Steps

**What You Can Do Now**

- Use Classroom-Based interventions that target language learning for the whole class
- Build collaboration buy-in with teachers by sharing classroom strategies
- Advocate for built-in planning time between SLPs and teachers
- Communicate with administrators about how collaborative services work and improve outcomes for all students
- Provide informational sessions for parents to better prepare to engage in discussions on service delivery

## Appendix F

### Teacher Resource Pamphlet

#### Moving Forward


Start by building in small moments for collaboration with your SLP through email or before/after school

See classroom-based services as an opportunity to strengthen language strategies into the classroom content

**Make the Cultural Shift**

- Research shows classroom-based services can help with generalizing language skills

<https://www.adobe.com/products/linefly.html>  
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**Don't wait—small steps like co-planning one lesson starts a ripple effect to the use of more classroom based therapy.**

Useful Website  
*How SLPs and Teachers Can Effectively Collaborate*

<https://www.communicationcommunity.com/how-slps-and-teachers-can-collaborate/>

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**GET STARTED**



Collaboration creates stronger outcomes for students with language needs

#### Action Steps for Change: Advancing Classroom-Based Services with SLP-Teacher Collaboration

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#### Collaboration with your SLP


Think of your SLP as part of your teaching team!

Invite the SLP to join grade-level planning or individual planning when possible.

Work with the SLP to align language goals with grade-level curriculum to ensure the practice of language content.

**Benefits of Classroom-Based Delivery**

- Natural Learning Environment
- Less disruption from classroom activities
- Skill carryover and generalization




#### Barriers to SLP-Teacher Collaboration

*What Gets in the Way*

- Not always knowing the role of the SLP in the classroom
- Lack of understanding of how the work of an SLP connects to classroom instruction
- Limited time for collaboration or co-planning
- Feeling unprepared to support language needs for high-incidence language students

**Collaboration benefits both students and teachers**



#### Practical Action Steps

*What You Can Do Now*

- Invite your SLP to co-teach lessons that naturally support language (e.g., vocabulary, comprehension, grammar, story retelling)
- Use language enhancing strategies suggested by an SLP, like visuals, graphic organizers, or sentence starters
- Share your classroom expertise with your SLP- they benefit from knowing what strategies help your students succeed

## Glossary

**American Speech-Language-Hearing Association (ASHA):** the national scientific and professional organization for audiologists, speech-language pathologists, speech, language, and hearing scientists, and related support personnel. It is the leading credentialing body in audiology and speech-language pathology, setting professional standards, publishing research, and advocating for quality services for people with communication disorders

**Classroom-Based:** working directly with the classroom teacher to support students' needs; therapy is incorporated in academic instruction and routines

**Classroom-Based Service Delivery Models:** examples include parallel teaching, station teaching, alternative teaching, teaming, one teach and one assist, and one teach and one observe

**Collaborative/Collaboration:** Partnership between the SLP and the classroom teacher; it involves shared planning, identified roles and responsibilities, and implementation of strategies to help address language and learning needs

***Andrew F. v. Douglas County School District RE-1, 580 U.S. 386 (2017):*** clarified that public schools must provide an IEP that is "reasonably calculated to enable a child to make progress appropriate in light of the child's circumstances" to fulfill their IDEA obligation for FAPE

**Expressive Language:** The ability to use words, sentences, grammar, and gestures to communicate one's own thoughts, needs, and emotions. Skills include: using vocabulary and putting words together to form phrases and sentences, asking questions and making requests, telling stories or describing events, and using correct grammar and complex sentence structures.

**Council for Exceptional Children (CEC):** is the largest international professional organization dedicated to improving the success of children and youth with disabilities and/or gifts and talents

**Free Appropriate Public Education (FAPE):** a legal right for students with disabilities in the United States, ensuring they receive a public education tailored to their individual needs at no cost to their families

**High Incidence Disabilities:** common conditions like specific learning disabilities, communication disorders, emotional/behavioral disorders, mild intellectual disabilities, and autism spectrum disorders that are frequently encountered in classrooms

**High Intensity Disabilities:** refers to conditions requiring a high level of complex, skilled support for daily living, often due to complex medical needs or multiple significant disabilities

**Individuals with Disabilities Education Act (IDEA):** a federal law mandating that children with disabilities receive FAPE and ensures they receive special education and related services. It establishes specific rights and protections for eligible students, from early intervention services for infants and toddlers (Part C) to special education for children and youth aged 3-21 (Part B)

**Inclusion:** providing services in the general education classroom; supporting students as they access the curriculum in the natural environment

**Interprofessional Education (IPE):** A structured learning process in which students or professionals from two or more disciplines learn with, from, and about each other to develop the collaboration and communication skills necessary for effective interprofessional practice

**Interprofessional Practice (IPP):** A collaborative approach in which professionals from different disciplines work together to improve student outcomes

**Least Restrictive Environment (LRE):** a federal requirement under IDEA that mandates students with disabilities be educated with their nondisabled peers to the maximum extent appropriate for their needs

**PL 94-142:** a U.S. federal law that required all public schools to provide FAPE and LRE for all eligible children with disabilities. It mandated the development of an Individualized Education Program (IEP) for each child, ensuring education was tailored to their unique needs and involved parental input. This landmark legislation was the precursor to IDEA

**Receptive Language:** The ability to understand the meaning of words, concepts, and sentences, as well as to follow directions and respond to questions. Skills include understanding vocabulary and concepts (e.g., big/little, hot/cold), following simple and multi-step directions, recognizing questions and responding appropriately, and identifying objects, people, and actions based on spoken cues

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