Oh the Teachers We Could Keep: A Systematized Review of Approaches to Supporting Early Career Teacher Retention

by

Maria A. Reichow

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Doctoral Committee:

Dr. Jeremy Singer, Chair

Dr. Samantha Hilbert

Emily Newberry

University of Michigan - Flint

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Abstract

Teacher attrition remains a persistent challenge for schools across the United States, with early career teachers particularly vulnerable to leaving the profession. This systematized literature review examined strategies and interventions that support the retention of early career teachers, defined as teachers within their first five years of teaching. A systematized search of ERIC identified 28 publications representing 27 unique studies meeting the established inclusion criteria. Studies examined induction programs, mentoring, financial incentives, workload adjustments, comprehensive support systems, and other retention focused interventions. Across the literature, mentoring and induction were the most frequently studied approaches, while substantially less information was available for financial incentives and workload adjustments. No single intervention emerged as a universal solution to early career teacher attrition. Instead, several patterns were identified across intervention types. Retention focused supports were most consistently associated with supportive professional relationships and organizational conditions, comprehensive and sustained systems of support, interventions responsive to teachers' developmental needs and school contexts, and supports addressing teachers' emotional well-being, resilience, confidence, and professional development. Findings also demonstrated that intervention effects varied across contexts and that increasing the number or intensity of support did not necessarily improve retention outcomes. Overall, the findings suggest that early career retention is best approached as a complex organizational challenge requiring sustained, coordinated, relationally supportive, and context-responsive systems, rather than isolated or universally applied interventions.

Keywords: early career teacher, teacher retention, teacher attrition, teacher induction, teacher mentoring, teacher support, systematized literature review

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Introduction

Schools depend on a stable and experienced teaching workforce to provide consistent, high-quality instruction and support student learning over time. However, many schools struggle to maintain this stability due to patterns of teacher turnover, particularly during the early years of teaching (Borman & Dowling, 2008; Ingersoll et al., 2018). High rates of turnover disrupt educational consistency, weaken organizational capacity, and create inequitable learning environments for students (Johnson et al., 2012; Ronfeldt et al., 2011; Sutcher et al., 2016). As a result, understanding the factors that influence teacher retention has become a concern for researchers, policymakers, and educational leaders seeking to strengthen school effectiveness and promote equitable educational outcomes.

Teacher Retention

Teacher retention has been a focus of educational research due to concerns about workforce stability, instructional quality, and equity. Although the terms retention, attrition, and turnover are often used interchangeably, they represent different patterns in education. Teacher attrition refers specifically to educators leaving the teaching profession, while teacher turnover may include both transfers between schools and departures from teaching. In contrast, teacher retention is the extent to which teachers stay in their schools and in the profession over time (Ingersoll et al., 2018). For the purposes of this review, retention-related outcomes include continued employment at the school, district, or professional level; movement between schools or districts; departure from the teaching profession; and teachers' intentions to remain or leave. These outcomes are considered within the broader context of teacher retention while recognizing that individual studies may define and measure them differently.

National data demonstrate that teacher turnover is widespread and persistent. Approximately 7-8% of teachers leave the profession annually, while an additional 7-9% transfer between schools, resulting in an overall turnover rate of over 15% per year (Carver-Thomas & Darling-Hammond, 2017; National Center for Education Statistics, 2024; Sutcher et al., 2016). The majority of teachers turnover occurs before retirement, with early career teachers disproportionately represented among those who leave (Borman & Dowling, 2008).

Teacher turnover carries significant financial and organizational costs. Replacing teachers requires investments in recruiting, hiring, onboarding, and professional development, while also contributing to lost productivity and weakened organizational capacity (Borman & Dowling, 2008). Estimates suggest that replacing a single teacher can cost districts tens of thousands of dollars, with national costs reaching billions annually (Sutcher et al., 2016). Beyond these financial costs, high turnover disrupts collaboration and instructional continuity and is associated with lower student achievement (Ronfeldt & McQueen, 2017). These effects can extend beyond the classrooms directly experiencing turnover, suggesting that teacher turnover also affects student learning through organizational disruptions .

Turnover is also inequitably distributed, with higher rates concentrated in schools serving low-income students and students of color (Goldhaber et al., 2011). Schools serving marginalized student populations are more likely to experience high turnover and employ inexperienced or underprepared teachers (Sutcher et al., 2016). Research indicates that these inequities are driven less by teacher preferences than by differences in working conditions and leadership quality across schools (Grissom, 2011; Johnson et al., 2012). As a result, teacher turnover can function as a mechanism that perpetuates educational inequality (Ingersoll et al., 2018).

The Early Career Teacher Experience and Attrition Risk

Early career teachers are commonly defined as those within their first three to five years of teaching, a period characterized by rapid professional learning, identity formation, and increased vulnerability to attrition (Borman & Dowling, 2008; Johnson et al., 2012). Attrition is disproportionately concentrated during these early years, with nearly half of new teachers exiting the profession within their first five years (Ingersoll et al., 2018). Teachers who remain beyond the first five years are more likely to stay long term, making the early career period particularly important for retention efforts (Ingersoll & May, 2012).

Although many teachers enter the profession with strong motivation, the transition into full-time teaching can present significant professional and organizational challenges. Early career teachers must simultaneously develop instructional practices, establish classroom management systems, address diverse student needs, navigate curriculum demands, and learn the expectations and norms of their schools (Hagger et al., 2011). A mismatch between preservice preparation and classroom realities can contribute to "reality shock," particularly when teachers lack adequate support (Hagger et al., 2011; Tait, 2008). These challenges may be compounded by organizational demands, including heavy workloads, limited planning time and resources, accountability pressures, limited autonomy, and exclusion from decision-making processes (Curry & O'Brien, 2012). More recent research has similarly identified positive working conditions as consistent predictors of lower teacher job dissatisfaction (Redding & Nguyen, 2024). Together, these professional and organizational demands can contribute to feelings of frustration, anxiety, isolation, and self-doubt during the early years of teaching (Hagger et al., 2011).

Sustained exposure to these demands can contribute to burnout among early career teachers. Burnout is characterized by emotional exhaustion, disengagement or cynicism, and a reduced sense of professional accomplishment (Perrone et al., 2019). Early career teachers may be particularly vulnerable to emotional exhaustion as they navigate the demands of developing instructional expertise and adapting to the profession. Burnout, fatigue, and stress have been associated with greater attrition, reduced career commitment, and decreased job performance, making teachers' emotional experiences during the early career period relevant to understanding retention (Curry & O'Brien, 2012; Perrone et al., 2019).

At the same time, resilience and self-efficacy may function as protective factors as teachers navigate the challenges of the early career period. Teacher resilience has been conceptualized not simply as an individual trait, but as a complex process shaped by the interaction of personal characteristics, professional experiences, and external supports (Beltman et al., 2011; Doney, 2013; Tait, 2008). Social and institutional supports may contribute to teachers' capacity to adapt to professional challenges and maintain commitment during periods of stress. Self-efficacy, or teachers' beliefs in their ability to influence student learning and successfully perform their professional responsibilities, may also contribute to persistence. Early career teachers with stronger perceptions of self efficacy and support report greater job satisfaction and persistence (Bastian et al., 2017; Li et al., 2019a).

Professional relationships also shape early career teachers' experiences as they develop confidence, competence, and a sense of belonging within their schools. Supportive relationships characterized by trust, respect, and care can strengthen teachers' confidence and their ability to navigate professional challenges (Le Cornu, 2013). Relationships with colleagues may be especially important during the transition into teaching by providing opportunities for advice,

collaboration, emotional support, and connection to the school community. Early career teachers who experience support from their colleagues have reported stronger feelings of belonging and connectedness, increased confidence, and greater job satisfaction (Auletto, 2021; Hagger et al., 2011; Kelly et al., 2019; Le Cornu, 2013). These findings suggest that early career teachers' persistence is shaped by their individual capacity to manage professional demands and the relational and organizational environments in which they begin their careers.

Targeted Retention Strategies

Because many factors associated with early career teacher attrition are potentially responsive to school and organizational action, researchers have examined strategies intended to support teachers during their transition into the profession. Early career teacher attrition may be particularly responsive to intervention compared with later career departures, which are often associated with retirement or life transitions (Ingersoll & May, 2012). Although recruitment remains important, reducing early career attrition may have a greater impact on workforce stability than increasing teacher recruitment alone (Sutcher et al., 2016).

Research has identified working conditions and organizational supports as important influences on teachers' decisions to remain in their schools and the profession. Administrative support, relationships with colleagues, professional autonomy, and access to instructional resources are associated with teacher retention (Borman & Dowling, 2008). Recent research has also identified compensation, supportive school leadership, and workplace satisfaction as factors associated with teacher retention (Tan et al., 2026). School leadership also plays an important role in creating supportive working environments and opportunities for professional growth, particularly in high-need schools (Grissom, 2011). For early career teachers, supportive leadership may include professional guidance and feedback as well as opportunities to participate

in school decision making (Auletto, 2021; Perrone et al., 2019). Leaders may also support persistence by recognizing the challenges early career teachers face and helping them access resources to address those challenges (Van Den Borre et al., 2021). Research suggests that early career attrition is influenced by working conditions, leadership, and organizational support rather than solely by teachers' commitment or ability (Carver-Thomas & Darling-Hammond, 2017; Johnson et al., 2012).

Induction and mentoring are among the most widely used approaches for supporting teachers as they enter the profession. Induction encompasses the orientation, support, and guidance provided to beginning teachers as they transition into their professional roles and may extend through the first several years of teaching(Kearney, 2014). Although induction programs vary in structure, research suggests that comprehensive approaches may include mentoring, opportunities for collaboration and observation, professional development, and other forms of professional support (Kearney, 2014; Kutsyuruba et al., 2017). Mentoring is often a main component of these programs, pairing early career teachers with more experienced educators who can provide professional guidance as well as emotional support (Carr et al., 2017; Gardiner, 2012; Kutsyuruba et al., 2017). These relationships may help teachers navigate instructional challenges and school expectations while also providing encouragement and support during the transition into the profession.

Early career support may also vary in its duration, intensity, and comprehensiveness. Rather than functioning only as an orientation to school procedures, induction has been seen as an ongoing process that supports teachers' professional development across the beginning years of their career (Kearney, 2014). Comprehensive induction may combine mentoring with collaboration, structured observations, professional development, networking, and other forms of

workplace learning (Kearney, 2014; Kutsyuruba et al., 2017). Coaching and other sustained forms of professional support may also provide individualized opportunities for early career teachers to develop instructional skills and respond to challenges as they emerge (Carr et al., 2017; Shernoff et al., 2015). These ideas suggest that early career support can range from simple interventions to coordinated systems of professional support.

The quality and responsiveness of support may also shape early career teachers' experiences. Formal access to a mentor or support program does not necessarily indicate that teachers receive the same type of intensity or assistance. Research on mentoring and coaching has emphasized the importance of trusting relationships in which early career teachers can seek guidance, discuss challenges, and receive feedback within a supportive environment (Gardiner, 2012). Mentoring and coaching may also be responsive to individual teacher needs through needs assessments, individualized professional goals, and support targeted towards specific instructional, professional, or emotional challenges (Carr et al., 2017; Maready et al., 2021; Reddy et al., 2021). These individualized approaches recognize that early career teachers enter schools with different professional strengths and needs, and that those needs may change as teachers gain experience.

Despite growing attention to early career teacher retention, determining what the existing evidence collectively supports remains challenging. Researchers have examined a range of strategies and conditions intended to support retention including induction, mentoring, leadership and organizational support, and teachers' working conditions (Kutsyuruba et al., 2017; Nguyen et al., 2020; Ronfeldt & McQueen, 2017). However, studies vary in the interventions and factors examined, the ways retention and turnover are defined, and the outcomes used to evaluate retention. For example, teacher turnover may include teachers who transfer to another school as

well as those who leave the profession, while other research may examine teachers' self-reported intentions to leave rather than observed turnover (Nguyen, 2020). This makes it difficult to compare findings across studies and for educational leaders to determine what the existing evidence suggests about strategies for supporting early career teacher retention. A systematic synthesis of this research is therefore warranted to clarify what is known about the strategies and interventions that support early career teachers in remaining in the profession.

Purpose

The purpose of this study is to systematically review existing evidence on strategies and interventions that support the retention of early career teachers.

Given the financial constraints many school districts face and the costs associated with teacher turnover, understanding the existing evidence on strategies and interventions intended to support early career teacher retention is important for informing district and school-level decision making. Beyond district-level applications, the findings may offer additional insights relevant to state and national policy. The challenge of teacher retention spans all levels of K-12 education, across states, school types, and student demographics, making it a pressing and consequential issue for educational leaders and policymakers.

Rationale

Early career teacher (defined as teachers within their first five years of teaching) retention is a pressing issue that significantly impacts schools across all levels and locations as well as students from all backgrounds. Studies have shown that up to 50% of teachers leave teaching within their first five years (Ronfeldt & McQueen, 2017). The exodus of early career teachers has a ripple effect on districts, schools, and students (Maready et al., 2021). This unnecessary

loss of teachers leads to a decrease in instructional quality and student achievement, financial problems for school districts, and workforce shortages (Kelly et al., 2018; Maready et al., 2021).

Decades of research confirmed that teacher effectiveness is the single most important school factor in determining student success (Nguyen et al., 2020). Experience, in particular, is one of the most reliable predictors of teacher quality and student growth (Auletto, 2021). Inconsistent staffing disrupts the continuity of instruction and weakens the relationships necessary for effective teaching and learning (Simon & Johnson, 2015). This information has led state, district, and local policymakers to try to find programs and interventions that support early career retention (Ronfeldt & McQueen, 2017).

Evidence highlights several promising strategies for supporting teacher retention. Structured mentorship and induction programs, especially those incorporating collaboration, feedback, and emotional support, help new teachers transition into the profession (Carr et al., 2017; McKinney et al., 2024; Ronfeldt & McQueen, 2017). Teacher residency models, and culturally responsive mentorship have demonstrated success, particularly in high-needs schools (Gardiner, 2012; Guha et al., 2016; Perry & Hayes, 2011).

Beyond mentorship, teacher retention is also influenced by working conditions, emotional support systems, and culturally responsive professional development. Supportive leadership, opportunities for collaboration, manageable workloads, and improved resources contribute to greater job satisfaction and reduce burnout (Boyd et al., 2011; Perrone et al., 2019). Financial incentives, such as loan forgiveness and retention bonuses, can further aid retention. Emotional and wellness supports, such as counseling, mental health resources, and wellness programs, help prevent burnout and enhance retention (Doney, 2013; Li et al., 2019b). Additionally, ongoing culturally responsive professional development that builds teacher's

capacity to engage diverse learners increases confidence, instructional quality, and overall retention (Sutcher et al., 2016).

Given the need for targeted retention strategies that address the unique challenges faced by early career teachers, a systematized literature review (SLR) is an appropriate approach for examining strategies that support early career teacher retention. Studies addressing early career teacher retention span multiple disciplines and use a wide range of methodologies. Many individual studies have identified promising interventions, such as mentoring, induction, leadership support, and improved working conditions; the findings are not always integrated. A SLR is needed to synthesize findings across studies, identify patterns in the available literature, and provide practical guidance for districts and policy makers seeking to improve teacher retention and strengthen overall quality of education.

Additionally, a systematized review can examine patterns across studies such as the difference in strategies by school context, student population, and teacher characteristics. Unlike traditional literature reviews, an SLR uses transparent and replicable procedures to strengthen the credibility of conclusions. This approach is valuable for informing district and policy-level decision making. By synthesizing existing research on early career teacher retention, this study seeks to understand strategies, identify gaps in the literature, and provide actionable recommendations for improving early career teacher retention.

Research Question

Building on this rationale, this study is guided by research questions that focus on identifying and comparing strategies shown to support the retention of early career teachers. Specifically, this review addresses the following question: *What strategies and interventions have been shown to support the retention of early career teachers?* This research question

provides a framework for organizing and synthesizing the existing research about strategies and interventions for early career teacher retention.

Methodology

Search Parameters

The systematized literature review followed a structured and transparent search process designed to identify relevant, high-quality studies examining strategies and interventions that support early career teacher retention. Clear search parameters were developed prior to the database search to guide article identification, screening, and selection and ensure replicability.

Inclusion and Exclusion Criteria

To ensure that articles in this systematized literature review are relevant and aligned with the purpose of the study, specific inclusion and exclusion criteria were established prior to the search. These criteria were used to guide article selection to support consistency throughout the screening process.

Studies were included in this review if they focused on early career teachers (defined as teachers within their first five years of total teaching experience, regardless of school or district) in public K-12 schools in the United States. Studies that included teachers at multiple career stages were eligible when early career teachers were the primary focus of the research. This review focused on teachers in public schools; charter schools were not separately identified in the search strategy, and private schools were outside the scope of this review. Additionally, studies were required to examine teacher retention as a central focus or outcome through actionable strategies or interventions that could be implemented by schools, districts, or at the state or national level. For this review, actionable strategies or interventions included both formally designed programs or supports and modifiable conditions or practices that schools or

districts could influence. Eligible studies examined retention directly or teachers' intentions to remain in or leave teaching. Retention-related outcomes included observed employment at the school, district, or professional level; movement between schools or districts; departure from the teaching profession; and intentions to remain or leave. Outcomes such as stress, resilience, self-efficacy, and perceptions of support were considered related findings rather than direct measures of retention. Only peer-reviewed studies or national reports from a reputable organization were included.

Studies were excluded if they were not published in English or if they consisted of dissertations or informal reports. In addition, studies that focused only on fixed or contextual factors (e.g. teacher demographics or school characteristics) without examining a specific intervention intended to influence early career teacher retention were excluded. Finally, studies that focused exclusively on pre-service teachers or teacher preparation programs without examining currently employed early career teachers were excluded.

Search Strategy

The search was designed to identify empirical studies and national reports examining strategies and interventions that support retention of early career teachers in K-12 public schools within the United States. A list of keywords and descriptors was developed using ERIC terms related to early career teachers, K-12 public schools, and teacher retention. The terms were used to create a comprehensive search (see Appendix A). The search string was developed in consultation with the university librarian. The search was conducted in the ERIC database via EBSCOHost. Results from the search were uploaded to Covidence to facilitate a screening and organization of the articles. A multi-stage screening process (described below) was used to identify studies that met the inclusion criteria for this review.

Limitations

Several limitations should be considered when interpreting the results of this systematized literature review. First, because this was a systematized rather than full systematic review, the search was limited to one database, ERIC through EBSCOhost. Relevant studies indexed in other databases might have been missed. The search was also limited to studies conducted in the United States and published in English, which may exclude relevant international research or studies published in other languages. Second, the exclusion of dissertations and informal articles may have limited the inclusion of emerging information not yet available in peer-reviewed journals and introduced potential publication bias. Finally, variations in study design, definitions of teacher retention, and outcome measures limit direct comparisons of findings. In particular, studies measuring actual retention or turnover, intention to remain or leave, and retention related professional outcomes do not provide equivalent evidence of retention. Additionally, because intervention categories were based on how the original authors described their programs and strategies, differences in terminology and program components may have limited consistency across categories.

While this review synthesizes strategies and interventions intended to support early career teacher retention, it intentionally focuses on approaches that schools, districts, and policymakers could potentially influence, rather than examining all factors associated with retention. For example, this review did not examine retention among veteran teachers, differences across career stages, or other educational systems such as teacher preparation programs that influence teacher retention. Broader organizational factors, such as leadership and school climate, were not the primary focus of this review but emerged as important considerations in the included literature. These influences remain important contributors to

teacher retention and represent areas for future investigation. Additionally, because this review focused on early career teachers, the findings should not be generalized to teachers at other career stages, whose professional needs may differ considerably.

Search Results and Article Screening

The article selection process involves multiple stages, including initial database searches, title and abstract screening, and full-text review. This process is designed to systematically narrow the pool of studies to those most closely aligned with the purpose of this study.

Initial Search Results

The initial search of the ERIC database was conducted on December 24, 2025 and yielded 1,024 articles. Six duplicates were immediately removed, leaving 1,018 records. During the title and abstract screening, seven more duplicate articles were identified and removed resulting in 1,011 unique articles for screening.

Title and Abstract Screening

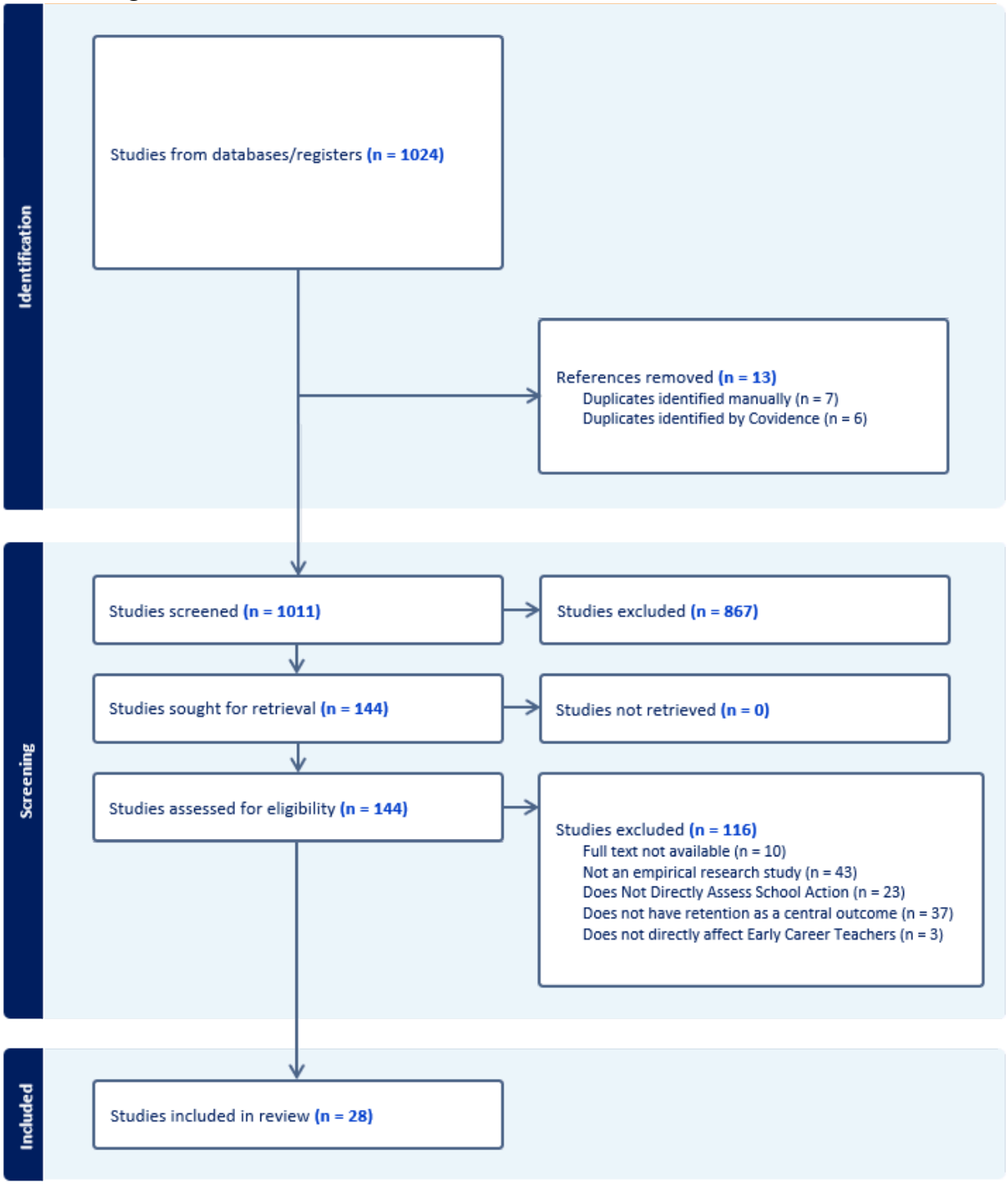
Titles and abstracts of the 1,011 articles were screened using the predefined inclusion and exclusion criteria. A second coder and I independently screened an initial sample of 63 (6%) of the studies. Inter-rater reliability was assessed using Cohen's kappa. Agreement between two independent coders was good ($\kappa = 0.65$), with 83% observed agreement across the studies. Disagreements with this initial sample were discussed and resolved collaboratively, and the inclusion or exclusion decisions for those studies were updated accordingly. This process clarified the application of the inclusion and exclusion criteria, which I then used to independently review the remaining studies. Of the 1,011 articles screened, 144 articles met the criteria for full-text review.

Full-Text Screening

Following the initial title and abstract screening, 144 articles were identified for full-text review. I independently examined each article in full to determine whether it met the established inclusion criteria. After completing the full-text review, 28 studies met the inclusion criteria and were included for article coding and data extraction. A total of 116 studies were excluded for not meeting the inclusion criteria. Forty-three studies were excluded because they were not empirical research studies, mostly consisting of literature reviews, commentaries, or magazine articles. Thirty-seven studies did not identify teacher retention as a primary outcome, instead focusing on related topics such as teacher preparation, job satisfaction, burnout, or teacher effectiveness. Twenty-three studies were excluded because they did not evaluate a school-based action or intervention intended to improve early career teacher retention, but instead described broader educational policies, teacher characteristics, and organizational factors. Ten studies were excluded because the full text could not be obtained despite database and library searches. Finally, three studies were excluded because they focused on teachers beyond the early career stage. The study selection process and reasons for exclusion are summarized in the PRISMA diagram (Figure 1).

Figure 1

PRISMA Diagram



Analysis

Article Coding and Data Extraction

A coding framework was developed to organize and analyze the selected studies examining strategies that support early career teacher retention. The framework was guided by the research question and designed to capture methodological characteristics, the interventions studied, and contextual features of each study. A structured data extraction process was used to ensure consistency across studies and support cross-study comparisons. Each article was reviewed in full and coded using a standardized set of categories, with notes to document a summary of the key findings.

The included studies examined a range of outcomes relevant to early career teacher retention including observed retention or turnover at the school or district level, intentions to remain or leave, and retention related outcomes. Since these outcomes represent different forms of evidence, they were considered when interpreting the findings of this review.

Intervention categories were developed to reflect the types of retention supports examined in the literature, including induction programs, mentoring, workload adjustments, salary and benefits, other interventions, and multiple interventions. Induction included studies primarily examining formal induction programs, induction policies, or supports provided within an induction framework, while mentoring studies primarily focused on the work between a mentor and mentee. Workload adjustments included modifiable teaching assignments and workload conditions, while salary and benefits included financial incentives. Other interventions included supports that did not fit the established categories. Multiple interventions included

studies examining several retention strategies or support structures rather than focusing primarily on one intervention type.

Because definitions and components of retention supports varied across studies, the authors' descriptions of their strategies and interventions were used to guide classification. Each article was assigned to one mutually exclusive intervention category based on the primary focus of the research and how the authors characterized the supports being examined. Programs containing multiple components were not automatically coded as multiple interventions. For example, a comprehensive induction program incorporating mentoring, professional development, and collaboration could still be classified as induction when the research primarily examined those components within an induction framework.

Thematic Analysis

Following data extraction, coded studies were reviewed to find recurring patterns across the literature. Studies were compared within and across coding categories (i.e., by methodology and by intervention type) to examine similarities and differences in how interventions were structured and how retention outcomes were reported. Through this process, patterns emerged related to the types of support provided, the intensity and duration of interventions, and contexts in which these supports were implemented.

Based on these patterns, findings were organized by intervention type to support a clear and systematized presentation of the results. This approach allowed for comparison across studies examining similar interventions while also highlighting the variation in findings, including positive and mixed results. Studies categorized as multiple interventions were analyzed

in relation to the different supports and strategies examined, recognizing that these approaches could be studied individually or in combination.

Although the intervention categories provided structure for organizing the results, the broader themes presented in the discussion were not predetermined. Rather, they were identified as recurring patterns while comparing findings across the included studies.

Results

Overview of Articles

Studies were analyzed to capture important contextual and descriptive characteristics including grade level taught (elementary, middle, high school), school setting (urban, suburban, and rural), and teacher type (general education, special education, other). Across the included studies, these characteristics reflected a range of educational settings and teacher populations. A summary of the characteristics of each included study is provided in Appendix C.

The review included 28 publications representing 27 unique studies. Isenberg et al. (2009) and Glazerman et al. (2010) reported findings from different stages of the same comprehensive teacher induction evaluation. Both publications were retained to include findings reported at different points in the study, but they were considered together when interpreting the evidence to avoid giving the overall study disproportionate weight.

The included studies examined a broad range of retention-related outcomes, including continued employment at the school, district, or professional level; movement between schools and districts; departure from the teaching profession; and intention to stay or leave. These outcomes were distinguished when interpreting findings because leaving a particular school or

district does not necessarily indicate departure from the teaching profession, and intentions do not necessarily reflect actual employment decisions.

Research Methods

Articles were coded according to their research methodology. Articles were classified as quantitative, qualitative, or mixed-methods based on the study methods used. Table 1 shows the distribution of the different study methods in the literature, with 12 articles (43%) being quantitative, 10 articles 36%) coded as mixed- methods, and 6 articles (21%) qualitative. Coding for study methodology allowed for examination of patterns in how evidence related to early career teacher retention has been generated across the literature.

Table 1
Study Methods in the Literature

Topics	Number (and Percentage) of Articles
Quantitative	12 (43%)
Mixed-Methods	10 (36%)
Qualitative	6 (21%)

Quantitative studies typically utilized survey data, administrative datasets, or longitudinal retention measures to examine the relationship between interventions and teacher retention outcomes. Several studies relied on large-scale survey data to examine teachers' experiences with supports and variables related to retention. For example, studies drawing on national datasets such as the Schools and Staffing Survey (SASS) and Teacher Follow-Up Survey (TFS) assessed participation in induction and mentoring supports, as well as teacher mobility and attrition patterns (Ingersoll & Smith, 2004; Ronfeldt & McQueen, 2017; Smith, 2007). Other studies used statewide or district-level survey instruments, such as teacher working condition

surveys, to examine perceptions of support structures such as mentoring, professional development, leadership, and collaboration (Parker et al., 2009). In contrast, some studies relied on program specific survey data collected from participants in support programs, gathering information related to mentoring dosage, communication and program characteristics (Caven et al., 2021). Across these studies, survey data were frequently used to examine teachers' reported experiences with support and retention related outcomes, including intentions to remain in the teaching profession, move to another teaching position or school, or leave the profession entirely.

In addition to survey approaches, several quantitative studies used administrative and longitudinal datasets to examine teacher retention over time. These studies often linked teacher data with school or student information to track mobility and persistence across multiple years (Bruno et al., 2020; Wiens et al., 2019). Some studies, such as those from Glazerman et al. (2010) and Isenberg et al. (2009), used experimental or quasi-experimental designs, including random assignments to treatment and control groups, to explore participation in structured induction programs. Similarly, DeCesare et al. (2017) used a randomized design where teachers were assigned to receive either standard mentoring intervention or enhanced mentoring intervention, with retention measured using district administrative data across multiple years. Others used longitudinal tracking or panel data to follow cohorts of teachers and examine retention patterns over time (Odell & Ferraro, 1992; Steele et al., 2010).

Qualitative studies relied heavily on interviews to explore early career teachers' experience with various types of support. Several studies used semi-structured interviews as the primary data source, often supplemented with follow-up interviews, artifacts, or program documentation to provide additional context (Barnes, 2024; Sowell, 2017). In some cases,

researchers incorporated multiple data sources, including participant journals, emails, and professional development artifacts to develop a more comprehensive understanding of teachers' experiences within different programs (Fry, 2010).

Some studies also used a phenomenological approach to examine the lived experiences of teachers participating in a mentoring program (Barnes, 2024), while others used grounded theory approaches to examine patterns and themes related to retention and early career teacher support programs (Cells et al., 2023; Olson Stewart et al., 2021). Data analysis often used coding procedures to identify emerging themes among participant responses. In addition to interview data, some studies incorporated other data collection methods, visual mapping activities, reflective journaling, and digital artifacts, to capture teachers' experiences from multiple perspectives (Olson Stewart et al., 2021).

Mixed-methods approaches combined quantitative and qualitative approaches to examine early career teacher retention, often integrating survey data, administrative records, and interview data to provide a more comprehensive understanding of support structures. Many studies used surveys as a primary quantitative component, collecting data on teachers' experiences with mentoring, induction, or workplace supports, while also incorporating open-ended responses or follow up interviews to add depth to these findings (Reitman & Karge, 2019; Tompkins, 2023). In several cases, survey data were supplemented with additional sources such as program artifacts, documents, or retention records allowing researchers to examine both reported experiences and measurable outcomes (Galosy & Gillespie, 2013; Villar & Strong, 2007). Across the studies, mixed-methods approaches were commonly used to capture both broad patterns in teacher experiences and more detailed descriptions of how interventions were implemented.

Mixed-methods designs varied across studies, with several using a sequential approach in which one phase of data collection informed the next. For example, some studies used an initial quantitative phase to explore retention patterns or survey responses, followed by qualitative interviews to further explore teachers' experiences and explain observed patterns (Adams & Woods, 2015; Warsame & Valles, 2018). Other studies used integrated designs in which quantitative and qualitative data were collected and analyzed together, such as comparative studies assessing different mentoring models or program evaluations incorporating surveys, interviews, and document analysis (Hallam et al., 2012; Wechsler et al., 2012). Data analysis across mixed-methods research included descriptive statistics, correlations, and comparative analysis for quantitative data. Researchers then used various coding procedures such as open coding, thematic analysis, and constant comparative methods for qualitative data.

Intervention Types

Articles included in this study were also coded based on the type of intervention examined. Intervention categories were developed to reflect the range of actionable supports identified in the literature, including induction programs, mentoring, workload adjustments, salary and benefits, other interventions, and multiple interventions. Table 2 shows the breakdown of the coding for intervention type. Coding by intervention allowed for the organization and synthesis of studies examining similar approaches while recognizing the variation in how the supports were defined and implemented.

Table 2
Types of Interventions in the Literature

Topics	Number (and Percentage) of Articles
Mentoring	11 (39%)
Induction Program	8 (28%)
Multiple Interventions	5 (18%)
Other	2 (7%)
Workload Adjustments	1 (4%)
Salary and Benefits	1 (4%)

The amount of evidence available varied substantially across intervention categories. Mentoring and induction represented the largest bodies of research, with 11 and 8 studies, respectively, while five studies examined multiple interventions and two examined other support models. In contrast, only one study examined salary and benefits and one examined workload adjustments. Consequently, findings related to mentoring and induction reflect patterns observed across multiple studies, whereas findings from less frequently studied intervention categories represent more limited evidence and should be interpreted cautiously.

Across the literature, induction programs were described as multi-component systems of supports designed to support early career teacher retention, as well as their instructional development and professional integration (Davis & Waite, 2006; Glazerman et al., 2010; Isenberg et al., 2009; Reitman & Karge, 2019). Some programs were comprehensive and well-developed, offering several components, and lasting multiple years (Davis & Waite, 2006; Glazerman et al., 2010; Isenberg et al., 2009; Reitman & Karge, 2019), while other programs were more limited in scope, shorter in duration, and included interventions that were more

generic or less aligned with teachers' needs (Fry, 2010). Many induction programs offered similar supports such as mentoring, professional development sessions, instructional coaching, collaboration time, observations and feedback, administrative support, and, in some cases, university coursework (Davis & Waite, 2006; Fry, 2010; Glazerman et al., 2010; Isenberg et al., 2009; Reitman & Karge, 2019).

While induction and mentoring were the most common topics, the literature covered a number of other strategies as well. One study examined financial incentives, including salary and benefits as a retention strategy (Steele et al., 2010). Another study focused on workload adjustments by examining how instructional assignments, teaching responsibilities, and school working conditions influenced retention outcomes (Bruno et al., 2020). Two studies evaluated support models that extended beyond traditional induction or mentoring frameworks. The C.A.R.E. model focused on emotional resilience, stress management, and professional well-being (Olson Stewart et al., 2021), while the STEM Teacher Fellowship combined professional learning, collaboration, and leadership development to support teachers' long-term commitment to the profession (Galosy & Gillespie, 2013). Finally, several studies examined comprehensive support systems that integrated multiple interventions. These included combinations of induction and mentoring (Wechsler et al., 2012), induction, mentoring, and workload adjustments (Ingersoll & Smith, 2004), and mentoring, coaching, and workload supports (Cells et al., 2023).

Strategies and Interventions for Retaining Early Career Teachers

Findings related to the research question are organized by intervention type. Within each category, studies are synthesized to describe patterns in retention outcomes, variation across programs, and key features associated with early career teacher retention.

Induction

Retention outcomes from induction programs varied across the literature. Studies examined the effects of induction programs on retention and mobility outcomes including staying in the profession, school, or district, movement between schools, or leaving teaching altogether (Glazerman et al., 2010; Isenberg et al., 2009; Ronfeldt & McQueen, 2017; Smith, 2007). The effects of induction programs on early career teachers differed based on the amount and type of support as well as overall program design. Some studies reported positive relationships between induction and retention, with programs demonstrating retention rates of up to 73% (Davis & Waite, 2006). Other studies reported more conditional findings, indicating that retention was associated with the level of support provided rather than participation in an induction program alone (Johnson, 2011). In contrast, large-scale studies found no statistically significant impact of induction programs on retention outcomes, even when participants received additional supports (Glazerman et al., 2010; Isenberg et al., 2009).

A strong theme across several studies was that the number of induction supports included in a program was associated with retention outcomes, with programs that included a greater number of components generally reporting stronger retention outcomes (Ronfeldt & McQueen, 2017; Smith, 2007). Ronfeldt and McQueen (2017) found that each additional support in an

induction program was associated with a decrease in migration by approximately 24% and attrition by approximately 20%.

At the same time, findings indicated that the relationship between the number of supports and retention was not uniform across studies. Some research suggested that program structure alone did not consistently predict retention outcomes (Glazerman et al., 2010; Isenberg et al., 2009; Smith, 2007). Instead, studies described variation in retention outcomes based on type and nature of supports provided within induction programs (Fry, 2010; Johnson, 2011). Studies examining teacher experiences reported that novice teachers valued supports related to relationships, increased competence, pedagogical development, and opportunities for reflection (Reitman & Karge, 2019). Additional findings indicated that higher levels of support were associated with reduced stress among early career teachers (Johnson, 2011). In comprehensive induction programs, teachers reported experiences that included support, relationship development, skill acquisition, and increased confidence (Davis & Waite, 2006). Overall, findings from studies examining induction programs indicated that retention outcomes varied considerably across contexts, with some evidence of positive effects, particularly in more comprehensive programs, alongside mixed findings in others, highlighting variation in how induction supports were structured and experienced across the literature.

Mentoring

In addition to induction programs, mentoring was one of the most frequently examined interventions in the literature, with studies investigating a variety of formal and informal mentoring programs designed to support early career teachers. Throughout the reviewed studies, mentoring typically involved pairing novice teachers with more experienced educators who

provided instructional, professional, and emotional support during the first years of teaching. Mentoring programs varied in structure, including district-led initiatives, induction-based models, and comprehensive programs. These programs often included structured observations, feedback, and professional learning opportunities (Adams & Woods, 2015; DeCesare et al., 2017; Wiens et al., 2019). Studies examining mentoring focused on retention outcomes, including teacher attrition and mobility, as well as teachers' experiences with mentoring support.

Many studies reported increased retention associated with mentoring (Adams & Woods, 2015; Odell & Ferraro, 1992; Villar & Strong, 2007; Wiens et al., 2019). For example, two studies documented increases in retention of approximately 10%, with one also reporting a 14% reduction in transiency, defined as movement between schools or districts (Adams & Woods, 2015; Wiens et al., 2019).

Villar and Strong (2007), in a benefit-cost analysis of a comprehensive mentoring program, found lower attrition rates among participating teachers compared to comparison groups. Similarly, Odell and Ferraro (1992) reported low attrition rates over a four-year period, with projections indicating that a large majority of teachers would remain in the profession over time. Across these studies, retention rates remained high over multiple years, frequently ranging between approximately 80% and 90%.

One of the most consistent findings among the literature was that higher levels of mentoring dosage were associated with increased teacher retention, with several studies identifying statistically significant relationships between mentoring intensity and retention outcomes (Caven et al., 2021; DeCesare et al., 2017). For example, DeCesare et al. (2017) found that mentoring doses totaling 10 hours were associated with a doubling of teachers' likelihood of

remaining in the district, with each additional hour of mentoring increasing the odds of retention by approximately 12%.

Frequency and duration of mentoring were also examined as factors related to retention. Whitaker (2000) reported that 60% of teachers who received mentoring at least weekly rated it as effective, compared to only 10% of teachers who experienced mentoring less frequently. Findings from Parker et al. (2009) indicated that this relationship was not linear, as teachers who engaged in mentoring interactions several times per month reported higher intentions to remain in the profession than those who experienced daily mentoring interactions. Hallam et al. (2012) found that teachers desired continued collaboration and support beyond the initial years of teaching, particularly during the third year. Similarly, DeCesare et al. (2017) reported that mentor-mentee relationships strengthened over time, with participants valuing sustained engagement across multiple years.

Several program features were associated with retention outcomes. Studies indicated that mentees valued mentor matching based on shared grade level, content area, building, or teaching assignment (Barnes, 2024; Parker et al., 2009). Among these factors, grade-level matching demonstrated a statistically significant relationship with retention intentions, while other forms of alignment showed positive, but less consistent associations. Qualitative findings further indicated that a lack of alignment between mentors and mentees was associated with dissatisfaction among teachers who ultimately left the profession (Barnes, 2024).

The type of support provided by mentors was also linked to retention related outcomes. Novice teachers reported greater value in mentoring activities focused on instructional strategies, access to resources, and lesson planning, compared to those centered on classroom management

and administrative tasks (Caven et al., 2021; Parker et al., 2009; Sowell, 2017; Whitaker, 2000). Studies also identified emotional support and the development of trusting mentor-mentee relationships as important components associated with retention (Caven et al., 2021; Hallam et al., 2012; Parker et al., 2009; Sowell, 2017; Whitaker, 2000). Mentoring was further characterized by collaborative, job-embedded support, including non-evaluative observations and timely feedback (DeCesare et al., 2017; Hallam et al., 2012; Sowell, 2017).

Salary and Benefits

In contrast to mentoring and induction, evidence examining salary and financial incentives as interventions for early career teacher retention was limited, with one study investigating the effects of a large-scale financial incentive program. Steele et al. (2010) examined California's Governor's Teaching Fellowship (GTF), a $20,000 conditional scholarship designed to attract academically talented novice teachers to low-performing schools and retain them for a minimum of four years.

Findings indicated that the financial incentive was associated with substantial increases in recruitment into low-performing schools. Specifically, receiving the fellowship increased the likelihood that teachers would begin teaching in low-performing schools by approximately 28 percentage points. However, findings related to retention were less clear. Among teachers who began teaching in low-performing schools, approximately 75% of both fellowship recipients and non-recipients remained in those schools for at least four years, suggesting similar persistence rates across groups. Within this single study, financial incentives were associated with increased entry into targeted teaching positions but were not associated with clear differences in long-term retention outcomes once teachers entered into those positions.

Workload Adjustments

In this body of literature, one study examined workload and organizational conditions associated with early career teacher retention. Bruno et al. (2020) examined four key dimensions of working conditions: instructional load, homophily (demographic similarity), colleague qualifications, and professional culture. One of the most relevant findings related to early career teacher retention focused on instructional load of novice teachers. Researchers found that, compared to veteran teachers, novice teachers had higher instructional loads and more challenging teaching assignments. Instructional load included the number of course preparations, changes in grade level taught, class size, and student characteristics such as lower prior achievement, higher rates of discipline issues (specifically suspensions), greater proportions of English language learners, and higher levels of poverty. These differences occurred both across and within schools, indicating that novice teachers were more likely to be placed in more challenging schools and assigned more demanding classrooms within those schools.

Findings also indicated that higher instructional load is associated with less favorable teacher outcomes, including lower contributions to student achievement, lower evaluation ratings, and lower attendance rates. In addition, more favorable working conditions were associated with higher retention rates. Bruno et al. (2020) reported that differences in working conditions accounted for approximately 16% of the gap in retention between novice and veteran teachers, indicating that variations in workload and organizational context contributed to differences in teacher persistence across experience levels. Overall, these findings suggest that workload and placement conditions were associated with retention outcomes for early career teachers within the study.

Other Programs

The C.A.R.E. Model, studied by Olson Stewart et al. (2021), is a 15-week intervention designed to support early career teachers through a focus on emotional support, resilience, self-efficacy, and stress management. Participants were provided release time to attend monthly sessions that addressed feelings of stress, isolation, and exhaustion, while also supporting the development of self-advocacy and communication skills. Across the duration of the program, teachers reported increases in these areas, with quantitative indicators showing a 33% increase in perceived emotional support, a 67% increase in resilience, and 83% of teachers reporting an improved ability to overcome setbacks. At the conclusion of the intervention, approximately 83% of participants remained in the same district.

Another holistic teacher development program examined in the literature was a five-year, STEM focused teaching fellowship (Galosy & Gillespie, 2013). This program provided sustained support through a professional learning community, opportunities for inquiry into practice, leadership development, and ongoing professional and financial resources. Retention among participants in this program was notably high, with approximately 97% of teachers remaining after the first year and 89% after five years. Participants identified the professional community developed through the fellowship as a particularly important source of support, and findings indicated a relationship between satisfaction with this community and a lower intention to leave the profession.

Although these two programs differed in structure and focus, both incorporated forms of support extending beyond traditional interventions, including professional identity, opportunities for reflection and growth, and connection to a professional community. Both studies reported

positive retention outcomes; however, the limited number and differing designs of these interventions limit broader conclusions about the effectiveness of these types of support models (Galosy & Gillespie, 2013; Olson Stewart et al., 2021)

Multiple Interventions

A few studies in the body of research examined the use of multiple interventions simultaneously (Cells et al., 2023; Ingersoll & Smith, 2004; Tompkins, 2023; Warsame & Valles, 2018; Wechsler et al., 2012). Across the studies, multiple interventions were described as a combination of supports, rather than single strategies, often including mentoring, collaboration, and professional development. Similar to induction programs, these approaches incorporated multiple components to support early career teachers through a range of professional and organizational supports. Results varied across the research; however, findings indicated that the number of supports teachers received was associated with turnover outcomes, with teachers who received more comprehensive sets of supports demonstrating substantially lower rates of turnover (Ingersoll & Smith, 2004). Teachers who received no supports had turnover rates of approximately 40%, while those who received multiple supports had progressively lower turnover rates, at approximately 24% (Ingersoll & Smith, 2004).

In addition to examining turnover rates, Ingersoll and Smith (2004) found that some supports were more strongly associated with reduced turnover than others. Teachers who had a mentor in the same field, common planning time, opportunities for collaboration with colleagues, and access to external teacher networks experienced lower turnover rates. In contrast, supports such as reduced teaching schedules, fewer course preparations, and extra classroom assistance were less strongly associated with reduced turnover. These findings highlight variation not only

in the number of supports provided but also in the types of supports included within multiple component approaches. Teachers' perceptions of supports reflected similar patterns as teachers identified collaboration with colleagues, administrative support, mentoring, and professional development as the most influential supports during their years (Cells et al., 2023; Warsame & Valles, 2018). Teachers who remained in the profession described strong and consistent support systems, whereas those who left reported a lack of support across multiple areas (Warsame & Valles, 2018).

Teacher perceptions were also examined by Tompkins (2023), who explored how early career teachers' experiences with preparation programs, induction or mentorship, and workplace conditions during their first five years of teaching were related to how frequently they considered leaving the profession. Findings indicated that teachers who reported stronger preparation and more useful induction or mentoring experiences were less likely to report frequently considering leaving. These teachers also reported lower levels of stress compared to those who experienced less support. Additionally findings indicated that higher levels of stress early in teachers' careers were associated with increased consideration of leaving the profession over time, suggesting that early experiences were related to longer term retention related outcomes.

Findings by Wechsler (2012) contrasted with some of the earlier results. Researchers examined a state-funded induction program that included multiple interventions such as mentoring, professional development, and formal assessments. While stronger induction supports were associated with improved professional outcomes, including teacher efficacy and self-reported growth, they were not associated with improved retention. Instead, school

contextual factors, including leadership, collaboration, access to resources, and overall school climate were identified as stronger predictors of retention outcomes.

Overall, findings across studies examining multiple interventions generally indicated that combinations of supports were associated with reduced turnover, although this pattern was not consistent across all studies. Outcomes varied based on the types of support provided, teachers' experiences of those supports, and the broader school context in which they were implemented (Cells et al., 2023; Ingersoll & Smith, 2004; Tompkins, 2023; Warsame & Valles, 2018; Wechsler et al., 2012).

Discussion

The purpose of this review was to examine strategies and interventions that support early career teacher retention. Across the studies included in this review, researchers examined a variety of interventions, including induction programs, mentoring, financial incentives, workload adjustments, and comprehensive support systems. While findings varied across intervention types and study contexts, several patterns emerged from the literature. Rather than identifying a single intervention that consistently improved retention, this review revealed recurring patterns in the characteristics of supports associated with early career teacher retention. Across the literature, these patterns centered on relational and organizational support, comprehensive and sustained approaches, responsiveness to teacher and school context, and attention to teachers' emotional and developmental needs.

Relational and Organizational Conditions

One of the strongest patterns that emerged across the literature was the importance of relational and organizational support systems. Teachers consistently identified supportive

relationships with mentors, colleagues, instructional coaches, and school leaders as valuable components of retention-focused interventions (Davis & Waite, 2006; Hallam et al., 2012; Parker et al., 2009; Sowell, 2017). Although relationships themselves are not necessarily conceptualized as standalone interventions, many of the interventions in this review were designed to foster professional connections and support networks among early career teachers. Additionally, studies examining school context and working conditions found that organizational factors such as leadership, professional culture, and workload were associated with teachers' decisions to remain in the profession (Bruno et al., 2020; Johnson, 2011; Wechsler et al., 2012). These findings suggest that retention is not only influenced by formal programs and interventions, but also by the professional environments in which early career teachers work.

Evidence supporting this pattern emerged across multiple intervention types. Within mentoring programs, teachers consistently mentioned the importance of emotional support, trusting relationships, and non-evaluative feedback from mentors (Hallam et al., 2012; Parker et al., 2009; Sowell, 2017). Similarly, studies examining induction programs found that new teachers valued opportunities to build professional relationships, develop competence, and engage in reflection with colleagues and supervisors (Davis & Waite, 2006; Reitman & Karge, 2019). Even a study that focused primarily on working conditions found that leadership, school climate, and professional culture were associated with retention outcomes (Bruno et al., 2020). Altogether, these findings suggest that while interventions differed in structure and implementation, many of the supports associated with retention shared a common emphasis on supportive professional relationships and organizational conditions.

These findings align with earlier literature suggesting that supportive professional relationships can serve as protective factors for early career teachers by strengthening resilience, confidence, and belonging during the transition to the profession (Le Cornu, 2013; Tait, 2008). Previous research suggests that, in addition to individual commitment, attrition is shaped by organizational conditions, including administrative support professional relationships, autonomy, workload, and school climate (Borman & Dowling, 2008; Carver-Thomas & Darling-Hammond, 2017; Grissom, 2011; Johnson et al., 2012; Kelly et al., 2018; Perrone et al., 2019).

At the same time, the presence of formal supports did not guarantee retention across studies. Wechsler et al (2012), for example, found that stronger induction experiences were associated with professional growth and efficacy but did not independently predict retention, while broader school conditions such as leadership, collaboration, and access to resources were more strongly associated with retention outcomes.

Across intervention types, the reviewed studies frequently identified professional relationships, collaboration, and organizational support as important components of early career teachers' experiences. These patterns suggest that relational and organizational conditions may play a role in supporting early career teacher retention, although the studies included in this review do not establish whether these conditions have a greater influence on retention than participation in a specific intervention. This pattern emphasizes the importance of considering both formal retention focused interventions and the organizational conditions in which early career teachers work.

Comprehensive and Sustained Supports

In addition to relationships and organizational conditions, another pattern that emerged from the literature is the importance of how the support or intervention is structured. Across the studies, retention-focused supports frequently extended beyond a single form of support. Instead, supports were often embedded within comprehensive systems that combined mentoring, professional development, coaching, and collaborative opportunities addressing multiple dimensions of the early career teacher experience (Davis & Waite, 2006; Fry, 2010; Glazerman et al., 2010; Isenberg et al., 2009; Reitman & Karge, 2019). Ingersoll and Smith (2004) found a relationship between the number of supports teachers received and turnover outcomes, with turnover rates declining as support programs became more comprehensive.

Findings of this review align with earlier research emphasizing the value of integrating multiple, sustained forms of support within comprehensive induction (Kutsyuruba et al., 2017). Mentoring studies similarly identified associations between sustained or higher levels of support and retention outcomes (Caven et al., 2021; DeCesare et al., 2017). Likewise, earlier literature identified mentoring and coaching as central components of comprehensive induction, emphasizing that sustained relationships promote trust, reflection, and professional growth over time (Kutsyuruba et al., 2017; Le Cornu, 2013). These findings suggest that the contribution of mentoring may be influenced by the consistency and depth of participation over time.

At the same time, findings from Wechsler et al. (2012) complicate the assumption that more support automatically results in stronger retention. Although teachers reported growth and increased efficacy, the presence of multiple induction supports alone did not predict retention outcomes. Similar complexity emerged in mentoring studies, where greater frequency in

mentoring interactions was not always associated with stronger retention intentions (Parker et al., 2009). Taken together, these findings suggest that the number of supports alone does not explain retention outcomes. Across studies, sustained engagement and the integration and quality of supports appeared to be important alongside the number of supports available.

Contextual Fit and Responsiveness

While the findings of this review support the value of relational and comprehensive support systems, they also suggest that these interventions do not function universally across contexts. Instead, outcomes appear to vary according to the alignment between the support provided, teachers' needs, and the organizational realities of the schools in which they work. Findings from Wechsler et al. (2012) illustrate the importance of contextual alignment. Although teachers benefited professionally from induction supports, retention outcomes were more strongly associated with school-level factors such as leadership, collaboration, and access to resources. This suggests that the potential benefits of formal support systems may be limited by the organizational contexts in which they are implemented. This interpretation reinforces earlier literature identifying leadership, working conditions, and organizational support as key influences on early career teacher retention (Borman & Dowling, 2008; Grissom, 2011; Johnson et al., 2012)

Additionally, Bruno et al. (2020) found that novice teachers were disproportionately placed in demanding instructional environments with less experienced administrators and slightly weaker credentials than veteran teachers, suggesting that staffing decisions may contribute to attrition due to the increased complexity of teachers' work at the beginning of their careers. These findings suggest that even when mentoring or induction supports are available,

novice teachers assigned to high-need students, multiple course preparations, or classrooms with significant behavioral challenges, may experience workloads that exceed the capacity of those interventions. In this way, Bruno et al. (2020) demonstrate how organizational conditions may constrain retention-focused supports when novice teachers also face unsustainable professional demands.

Earlier research has similarly emphasized the importance of assessing teachers' needs and tailoring supports accordingly, offering a more individualized approach (Kutsyuruba et al., 2017). Findings from this review reinforce the importance of responsiveness to teachers' individual and professional needs. Fry (2010) similarly found that general induction supports did not always address the specific challenges teachers experienced, showing the importance of targeted support aligned with professional needs. Similarly, Parker et al. (2009) found that mentoring characteristics, including mentor matching and the type of support provided, were associated with differences in teachers' experiences and retention intentions. Collectively, these findings suggest that standardized approaches to early career teacher support may not respond equally well to the needs of all teachers.

The research suggests that outcomes associated with retention focused supports may depend on the structure of the support and how well it aligns with teachers' professional needs and the organizational conditions in which they work. Rather than relying on universally applied approaches, retention efforts may be strengthened when they are flexible, adaptive, and responsive to teachers' evolving needs.

Emotional and Developmental Support

The findings of this review also suggest that teacher retention is influenced by teachers' emotional and developmental experiences as they enter the profession and throughout their initial years of teaching. Although many interventions studied in this review focused on retention through the lens of instructional development and organizational support, several studies also examined the outcomes related to teacher resilience, self-efficacy, professional identity, and belonging. These findings suggest that retention-focused interventions may support early career teachers not only through instructional development and organizational assistance, but also by supporting their psychological and emotional transition into the profession.

Several studies incorporated interventions that helped teachers develop confidence, efficacy, professional growth, and reflective practice during the early years of a teacher's career (Davis & Waite, 2006; Reitman & Karge, 2019; Wechsler et al., 2012). These developmental outcomes suggest that retention interventions may also contribute to the development of a teacher's professional identity. Although the interventions differed in structure, the studies identified similar developmental outcomes. Davis and Waite (2006) found that mentorship provided a safe environment where beginning teachers felt comfortable taking risks and asking questions. Graduates described the program as supporting professional relationships, instructional knowledge and skills, confidence, leadership, and positive professional dispositions. Reitman and Karge (2019) showed that throughout participation in a five-year induction program, teachers' attitudes progressed from concerns about survival and daily tasks to reflection and attention to their influence on students. This suggests that professional growth is a gradual process where early career teachers benefit from time and structured assistance as they grow into their professional roles. Similarly, Wechsler et al. (2012) found that stronger induction

experiences were associated with greater teacher efficacy and self-reported professional growth, even if induction variables did not independently predict retention. Importantly, this finding shows that developmental outcomes such as efficacy and professional growth are not synonymous with retention. Instead, these outcomes may represent one dimension of teachers' early career development alongside organizational conditions and other factors associated with their decision to remain.

In addition to professional growth, findings from several studies suggest that emotional support and resilience may represent another route through which retention focused programs support early career teachers. The C.A.R.E model (Creating Authentic Resilient Educators) was specifically designed to address the emotional and psychological challenges experienced by beginning out-of-state teachers (Olson Stewart et al., 2021). This model emphasized emotional support, reducing feelings of isolation, and developing personal coping strategies for managing the demands of the teaching profession. During the early stages of the intervention, participants described feeling stressed, exhausted, and isolated. As the program progressed, however, participants reported greater resilience and confidence, and an increased ability to manage the challenges of teaching (Olson Stewart et al., 2021). Rather than focusing exclusively on instructional competence, the C.A.R.E. model illustrates how retention interventions can intentionally support teachers' emotional well-being and capacity to navigate the psychological demands of the profession. Additionally, across several mentoring studies, teachers consistently emphasized trust, emotional support, mentor availability, and psychologically safe relationships as important components of their mentoring program (Hallam et al., 2012; Parker et al., 2009; Sowell, 2017).

While emotional support and resilience may help teachers navigate the early years of teaching, findings also demonstrate the relationship between unmanaged stress, inadequate support, and teachers' intentions to leave. Rather than portraying stress as an unavoidable aspect of beginning teaching, Tompkins (2023) found that teachers' stress was associated with their preparation, induction experiences, and workplace supports. Similarly, Johnson (2011) demonstrated how the relationship between challenge and support was associated with teachers' motivation and commitment. Teachers who experienced significant professional challenges without adequate support described greater anxiety and were less likely to remain committed to their schools and the profession. Together, these findings illustrate how teachers' emotional experiences are connected to the professional and organizational conditions of their work. This reinforces earlier literature suggesting that resilience develops through supportive professional relationships and organizational conditions rather than individual perseverance alone (Le Cornu, 2013; Tait, 2008). Earlier research examining beginning teachers' experiences of "reality shock" similarly emphasizes the importance of belonging and professional support as teachers navigate the challenges of entering the profession (Hagger et al., 2011; Le Cornu, 2013; Tait, 2008).

The findings of this review suggest that early career teacher retention should be understood not only as an organizational or instructional challenge, but also as a developmental and emotional process. Although the interventions examined differed in structure and purpose, several were associated with outcomes related to teachers' resilience, confidence, professional growth, and capacity to navigate the challenges that arose during the initial years of teaching. Supporting early career teachers involves more than developing instructional expertise; it also involves creating professional environments that encourage growth, meaningful relationships,

emotional support, and a sense of belonging. This review suggests that teachers' developmental and emotional experiences represent an important component in the larger systems of support surrounding early career teacher retention.

Implications for Practice

Improving early career teacher retention requires attention to more than implementing individual programs or isolated interventions. Although mentoring, coaching, induction, professional development, and collaborative opportunities were associated with positive outcomes across the literature, the most consistent pattern across the studies favored sustained, coordinated, and relationally supportive approaches. Rather than functioning independently, these supports often operated within broader systems addressing the instructional, organizational, professional, and emotional challenges of teaching.

Educational leaders should approach teacher retention as a coordinated system of support rather than a collection of isolated initiatives. A comprehensive approach might include structured induction, high-quality mentoring, opportunities for collaboration, instructional coaching, supportive school leadership, and ongoing professional development that extends beyond teachers' first year. Schools and districts may be tempted to invest in a single intervention due to limited resources and competing priorities. However, the recurring patterns identified across this review suggest that decision makers should consider how individual supports operate together and address multiple dimensions of the beginning teacher experience.

Importantly, a comprehensive system does not necessarily require implementing every available support simultaneously. Instead, educational leaders should consider how existing initiatives work together to create a coherent network of support for early career teachers. When

mentoring, professional development, induction, and leadership practices are intentionally aligned, they may collectively strengthen teachers' professional growth, organizational connectedness, and long-term commitment to the profession. This systems-oriented approach represents a shift away from viewing retention as the responsibility of a single program toward recognizing it as an organizational priority supported through multiple, coordinated efforts.

Within these comprehensive systems, organizations should intentionally invest in supportive professional relationships and positive organizational conditions. Across multiple interventions, teachers consistently identified trusting relationships with mentors, colleagues, and leaders as an important source of support in their early years of teaching. These relationships provided more than instructional guidance; they created opportunities for collaboration, instructional growth, constructive feedback, and emotional support. As a result, educational leaders should view relationship-building as a central component of retention efforts rather than a secondary benefit of an induction or mentoring program.

Creating supportive organizational conditions also extends beyond assigning mentors or offering professional development. Beginning teachers benefit from environments that encourage collaboration, provide access to instructional coaching, foster psychologically safe professional relationships, and promote supportive leadership practices. Leaders who are intentional in building school environments that cultivate trust, shared learning, and professional collaboration may strengthen teachers' sense of belonging and commitment while reducing feelings of isolation frequently experienced during the early years of teaching. Leaders should recognize that professional interactions contribute to the organizational environment in which early career

teachers work and may shape teachers' experiences of support, belonging, and professional commitment.

Additionally, retention efforts should extend beyond teachers' first year in the classroom and remain responsive to their changing professional needs. Across several studies, sustained engagement and continued access to support were associated with developmental and retention related outcomes (DeCesare et al., 2017; Hallam et al., 2012). These findings suggest that teachers may benefit from different types of professional support as they gain experience, including opportunities for instructional refinement, reflection, and professional growth. Organizations should consider retention efforts as ongoing developmental processes rather than programs defined solely by fixed timelines.

Support should also be flexible and adaptive to teachers' needs, rather than standardized. Teachers enter the profession with different experiences, work in different school cultures, and encounter varying levels of challenge during their early careers. As a result, a one-size-fits-all approach is unlikely to meet the needs of every beginning teacher. Educational leaders should regularly assess teachers' evolving needs and adapt mentoring, coaching, professional learning, and other supports as necessary. Rather than focusing only on whether support is available, educational leaders should also consider whether the type and timing of support align with teachers' evolving professional needs.

Significance for Researchers

This systematized literature review contributes to the growing body of research on early career teacher retention by synthesizing findings across a diverse range of intervention types and identifying patterns and links amongst studies. While much of the existing literature has focused

on evaluating specific interventions, such as mentoring, induction, or professional development, the findings of this review suggest that teacher retention is better understood as the product of multiple interacting factors rather than any single intervention. Future research should continue to move beyond evaluating isolated programs and instead examine how comprehensive systems of support interact with organizational conditions, school leadership, and teachers' developmental needs to influence retention outcomes.

In addition to examining whether an intervention exists, this review discusses the importance of how interventions are implemented. Throughout the literature, interventions varied in their structure, duration, intensity, and quality. These differences often corresponded to variations in retention outcomes. Future research should more closely investigate the implementation characteristics of these interventions, including factors such as mentor selection, the quality of professional relationships, duration of support, alignment between supports and teacher needs, and the organizational conditions in which the interventions occur. Additionally, future research should also examine how multiple interventions are implemented concurrently and whether these combinations produce different retention outcomes than individual interventions. Examining implementation alongside outcomes may provide a more complete understanding of why similar interventions produce different results.

This review also suggests that future research should continue to explore retention as a developmental process rather than only an employment outcome. Several studies identified improvements in teacher resilience, self-efficacy, professional identity, confidence, belonging, and stress management even when measurable differences in retention were limited. These

findings suggest that teacher development may represent an important additional outcome to examine alongside teachers' professional commitment and retention.

Finally, there is a need for additional research examining retention interventions across diverse educational settings. Although the studies included in this review represented a variety of school settings and intervention types, few directly compared how retention strategies functioned across different organizational environments. School context, leadership, workload, available resources, and student populations may all influence how retention-focused interventions are experienced and implemented. Focusing on these factors could help identify the conditions under which different approaches are associated with positive retention related outcomes.

Conclusion

Teacher retention continues to represent one of the most significant challenges facing the educational profession. High rates of early career teacher attrition affect students, schools, districts, and the stability of the educator workforce. As schools continue to invest resources in recruiting and preparing new teachers, identifying strategies to support teachers during their first years remains an important priority.

This review examined intervention strategies associated with early career teacher retention by analyzing findings across studies investigating mentoring, induction, comprehensive support systems, workload adjustments, financial incentives, and other retention-focused programs. Rather than identifying a single intervention that consistently improved retention, the most consistent patterns across the studies favored sustained, coordinated, and relationally supportive approaches that addressed multiple dimensions of teachers' early career experiences.

The findings of this review contribute to the existing literature by suggesting that early career teacher retention is best understood as a multifaceted process, rather than the outcome of an isolated intervention. Across intervention types, common themes emphasized the importance of supportive professional relationships, positive organizational conditions, sustained and responsive support, and attention to teachers' professional and emotional needs. Although no single intervention emerged as a universal solution, recurring patterns across the studies emphasized the value of meaningful, sustained, and responsive support throughout the early career teacher experience. These findings offer a framework that educational leaders may use when designing future support systems.

Supporting early career teachers requires more than helping them become effective instructors; it requires creating professional environments in which they are connected, valued, challenged appropriately, and given opportunities to develop over time. As teacher shortages continue to affect schools across the United States, developing coordinated systems of support represents an investment in the conditions associated with early career teachers' professional growth, well-being, and persistence. Ultimately, the future of teacher retention will depend not on finding a single solution, but on a sustained commitment to creating the conditions in which beginning teachers can thrive.

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Appendices

Appendix A: Search String

(DE ("Public schools" OR "school districts" OR "public school teachers" OR "public education" OR "elementary education" OR "secondary education" OR "elementary schools" OR "secondary schools" OR "elementary secondary education" OR "kindergarten" OR "grade 1" OR "grade 2" OR "grade 3" OR "grade 4" OR "grade 5" OR "grade 6" OR "grade 7" OR "grade 8" OR "grade 9" OR "high schools" OR "intermediate grades" OR "junior high schools" OR "middle schools") OR TI ("K-12" OR "public school*" OR "public school teachers" OR "school district*" OR "elementary school*" OR "secondary school*" OR "high school*" OR "middle school*") OR AB ("K-12" OR "public school*" OR "public school teachers" OR "school district*" OR "elementary school*" OR "secondary school*" OR "high school*" OR "middle school*")) AND (DE (("Teacher persistence" OR "faculty mobility" OR "teacher transfer" OR "teacher burnout" OR "teacher recruitment" OR "teacher shortage") OR TI ("Teacher retention" OR "retention" OR "attrition" OR "turnover" OR "intention to stay" OR "intent to stay" OR "teacher persistence" OR "educator retention" OR "educator persistence" OR "teacher attitudes" OR "teacher turnover" OR "teacher workforce") OR AB ("Teacher retention" OR "retention" OR "attrition" OR "turnover" OR "intention to stay" OR "intent to stay" OR "teacher persistence" OR "educator retention" OR "educator persistence" OR "teacher attitudes" OR "teacher turnover" OR "teacher workforce")) AND (DE ("Beginning teacher induction" OR "beginning teachers" OR "novices") OR TI ("Early career teacher" OR "beginning teacher" OR "novice teacher" OR "new teacher" OR "first-year teacher" OR "early career educator" OR "induction teacher" OR "beginning educator" OR "novice educator" OR "new educator" OR "first-year educator" OR "induction educator" OR "novices" OR "teacher turnover") OR AB ("Early career teacher" OR "beginning teacher" OR "novice teacher" OR "new teacher" OR "first-year teacher" OR "early career educator" OR "induction teacher" OR "beginning educator" OR "novice educator" OR "new educator" OR "first-year educator" OR "induction educator" OR "novices" OR "teacher turnover"))

Appendix B: Data Extraction Fields

- Title
- Author(s)
- Year
- Study Methods
    - Quantitative
    - Qualitative
    - Mixed-Methods
- Type of Intervention
    - Induction Program
    - Mentoring
    - Multiple
    - Salary and Benefits
    - Workload Adjustments
    - Other
- Grade Level
    - Elementary
    - Middle
    - High School
- Level of Intervention
    - School
    - District
    - State
- Teacher Type
    - General Education
    - Special Education
    - Other
- Summary of Key Findings

Appendix C: Summary of Included Studies

Table C1

Summary of Included Studies Examining Early Career Teacher Retention

Title	Author	Date	Study Methods	Sample size	Retention Outcome	Intervention Category	Setting
A model for recruiting and retaining teachers in Alaska's rural K-12 schools	Adams & Woods	2015	Mixed-Methods	282	Retention	Mentoring	Urban; Rural
A phenomenological exploration: Mentoring and teacher retention in an urban Maryland school district	Barnes	2024	Qualitative	11	Retention; Turnover	Mentoring	Urban
Taking their first steps: The distribution of new teachers in school and classroom contexts and implications for teacher effectiveness	Bruno et al.	2020	Quantitative	40,753	Retention; Turnover	Workload Adjustments	Urban
Variation in mentoring practices and retention across new teacher demographic characteristics under a large urban district's new teacher mentoring program	Caven et al.	2021	Quantitative	222	Retention; Turnover; Intentions	Mentoring	Urban
Addressing teacher retention within the first three to five years of employment	Cells et al.	2023	Qualitative	10	Intentions	Multiple	Suburban
The long-term effects of a public school/state university induction program	Davis & Waite	2006	Mixed-Methods	202	Retention; Attrition	Induction Program	Urban; Suburban; Rural

Title	Author	Date	Study Methods	Sample size	Retention Outcome	Intervention Category	Setting
Impacts of the retired mentors for new teachers program	DeCesare et al.	2017	Quantitative	77	Retention; Turnover	Mentoring	Urban
The analysis of an unsuccessful novice teacher's induction experiences: A case study presented through layered account	Fry	2010	Qualitative	1	Attrition	Induction Program	Rural
Community, inquiry, leadership: Exploring early career opportunities that support STEM teacher growth and sustainability	Galosy & Gillespie	2013	Mixed-Methods	112	Retention; Intentions	Other: Teaching Fellowship	Unknown
Impacts of comprehensive teacher induction: Final results from a randomized controlled study	Glazerman et al.	2010	Quantitative	1,009	Retention; Turnover; Attrition	Induction Program	Urban
Two contrasting models for mentoring as they affect retention of beginning teachers	Hallam et al.	2012	Mixed-Methods	23	Retention; Turnover	Mentoring	Not indicated
Do teacher induction and mentoring matter?	Ingersoll & Smith	2004	Quantitative	3,235	Retention; Turnover; Attrition	Multiple	Urban; Suburban; Rural
Impacts of comprehensive teacher induction: Results from the second year of a randomized controlled study	Isenberg et al.	2009	Quantitative	1,009	Retention; Turnover; Attrition	Induction Program	Urban

Title	Author	Date	Study Methods	Sample size	Retention Outcome	Intervention Category	Setting
Targeted comprehensive induction for urban educators: An exploration of teacher motivation and retention	Johnson	2011	Qualitative	4	Retention; Turnover; Attrition	Induction Program	Urban
Teacher mentoring and teacher retention	Odell & Ferraro	1992	Quantitative	160	Retention; Attrition; Intentions	Mentoring	Urban; Suburban; Rural
Keeping our teachers! Investigating mentoring practices to support and retain novice educators	Parker et al.	2009	Quantitative	8,838	Intentions	Mentoring	Urban; Suburban; Rural
Investing in teacher support leads to teacher retention: Six supports administrators should consider for new teachers	Reitman & Karge	2019	Mixed-Methods	60	Retention	Induction Program	Not indicated
Does new teacher induction really improve retention?	Ronfeldt & McQueen	2017	Quantitative	2,340	Retention; Turnover; Attrition	Induction Program	Urban; rural; suburban
How do state-level induction and standards-based reform policies affect induction experiences and turnover among new teachers?	Smith	2007	Quantitative	2,201	Retention; Turnover; Attrition	Induction Program	Urban; Suburban; Rural
Effective practices for mentoring beginning middle school teachers: Mentor's perspectives	Sowell	2017	Qualitative	3	Intentions	Mentoring	Unknown

Title	Author	Date	Study Methods	Sample size	Retention Outcome	Intervention Category	Setting
Do financial incentives help low-performing schools attract and keep academically talented teachers? Evidence from California	Steele et al.	2010	Quantitative	718	Retention; Turnover	Salary and Benefits	Urban; Suburban; Rural
Beginning teacher support model: Elementary teachers' resilience and retention in Arizona	Olson Stewart et al.	2021	Qualitative	6	Retention; Attrition	Other: C.A.R.E program	Urban
Breaking the cycle of teacher attrition: Suggested policies and practice for retention	Tompkins	2023	Mixed-Methods	2,196	Intentions	Multiple	Urban; Suburban; Rural
Is mentoring worth the money? A benefit-cost analysis and five-year rate of return of a comprehensive mentoring program for beginning teachers	Villar & Strong	2007	Mixed-Methods	119	Retention	Mentoring	Suburban; Rural
An analysis of effective support structures for novice teachers	Warsame & Valles	2018	Mixed-Methods	198	Retention; Attrition	Multiple	Not indicated
Examining the effects of new teacher induction	Wechsler et al.	2012	Mixed-Methods	2,670	Retention; Turnover	Multiple	Urban; Suburban; Rural
Mentoring beginning special education teachers and the relationship to attrition	Whitaker	2000	Mixed-Methods	156	Intentions	Mentoring	Urban; Rural

Title	Author	Date	Study Methods	Sample size	Retention Outcome	Intervention Category	Setting
New teacher mentoring and teacher retention: Examining the peer assistance and review program	Wiens et al.	2019	Quantitative	289-312 annually	Retention; Turnover	Mentoring	Urban