"Navigating Uncharted Waters":
New Teacher Mentoring and Induction

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Abstract	Article Info
Teacher attrition, a startling problem worldwide, can be counteracted with comprehensive mentoring and induction. The purpose of this qualitative case study was to describe a division-wide, job-embedded mentoring/induction program in three US elementary schools that determined key features/components influencing experience during a crisis. Research questions were: (1) How are school-based induction/mentoring programs explained in the literature relative to key features/components? (2) How do elementary practitioners involved in formal mentoring describe it? (3) What was the perceived effect of COVID-19 on this program? Based on the literature reviewed, support, accessibility, and collaboration (SAC) are important components of formal mentoring/induction. In 2021, mentor teachers, principals, and new teachers in Virginia completed a demographic survey and interviews. Per their self-reports, while the onsite program was operating during the pandemic, it did not uniformly demonstrate consistency and fidelity. Because the quality of mentoring was variable, the need for equitable support was recognized. Equity-embedded SAC was theorized as support, accessibility, collaboration, and equity (SACE) by the authors. It is time for equity to be widely recognized as a crucial feature of formal mentoring/induction. This is a direction for future research and program improvement.	

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Introduction

"In this strange time, we're navigating uncharted waters," commented
a teacher mentor who participated in our study of mentoring and
induction during a pandemic. Overwhelmed and unsupported, many
new teachers (novices) leave their schools or the profession (Bullough,
2012), with up to 50% of teachers in American schools resigning during
their first 5 years (Hobson, 2021; Sasson, Kalir, & Malkinson, 2020).
School layoffs and closings produce greater turnover for Black teachers
than white teachers (Carver-Thomas, 2018), and "organizational
conditions" perpetuate the "minority teacher shortage" (Ingersoll &
May, 2011, p. 2). Yet, comprehensive mentoring/induction, a systemic
strategy for decreasing turnover (Hobson, 2021), cuts "new teacher
turnover rates in half" in the United States, according to the National
Education Association (NEA, 2022). Smith and Ingersoll (2004), in their
analysis of a 1999–2000 Schools and Staffing Survey that was
representative of the United States, found that quality
induction/mentoring programs affected beginning teacher quality and
retention. New teachers were less likely to leave the profession in their
first year or to transfer to other schools when they benefited from
induction structures (e.g., access to same-subject mentors) and
activities (e.g., collaboration and planning with teachers). Similarly,
the benefits of comprehensive induction programs, analyzed by the
New Teacher Center (NTC, 2007) using national and state data (e.g.,

student test scores), indicated a return on investment; notably, first- and second-year teachers in California were retained over the 5-year study duration and effective in the classroom.

The purpose of this qualitative case study was to describe a division-wide, job-embedded mentoring/induction program in three US elementary schools and determine key features/components influencing experience during a crisis. Specifically, our aims were (1) to identify program components from the literature that are important for mentoring/induction to be effective and (2) to examine participants' perceptions to discern components influencing experience during a pandemic. We posed these research questions: (1) How are school-based induction/mentoring programs explained in the literature relative to key features/components? (2) How do elementary practitioners involved in formal mentoring describe it? (3) What was the perceived effect of COVID-19 on this program?

The program we studied was an existing new teacher mentoring initiative (anonymized) that operates in a suburban public school division within Virginia, USA. This districtwide program was founded in the 1990s to provide all teachers with mentoring through quality practices, professional teaching standards, classroom-based teacher learning, commitment, support, and program assessment, including an induction conference and yearlong course ([anonymized] profile document, 2015–2016). Understanding formal mentoring specifically within this context allows for examination of key features influencing perception and experience.

Practitioners' perceptions of mentoring in crisis contexts is a gap in elementary school studies. As established, teacher beliefs and attitudes influence a variety of student outcomes (academic ability, performance, and success), as well as school culture (e.g., Haverback,

2020; Mullen & Badger, in press). Districtwide, systemic mentoring also warrants further exploration based on the literature we reviewed. Formal mentoring/induction is widely investigated, but there is little research at the division level and as experienced by insiders during a global pandemic. (For an exception that encompasses K–12 schools but without analysis of elementary sites, see Mullen, Fitzhugh, & Hobson, 2022.) These research omissions offered an opportunity to contribute knowledge on elementary education during COVID-19. They are important to address, we think, considering the widespread disruption of COVID-19 on schools, globally, and need for ideas that can help with the recovery of quality school-based mentoring or, better yet, discovery of what is crucial in these times.

A discussion point is that in studies of school-based mentoring and induction, support, accessibility, and collaboration (SAC) provide a necessary foundation for program effectiveness (e.g., Mullen et al., 2022; Bullough, 2012; Hobson, 2021). Because the SAC components typify K–12 programs aimed at teacher professional development (PD) and retention and student achievement, they are useful as an analytic tool for understanding a mentoring initiative. However, as discovered by our study, findings in combination with equity studies brought equity and access to the fore, making SAC incomplete without an equity lens.

Relevant Literature

Literature Search

The research question, this literature review addresses is, how are school-based induction/mentoring programs presented in the existing literature relative to key features/components? Peer-reviewed studies were located through our home university's academic databases

(EBSCOhost, etc.) and Google Scholar. Literature in the US context and internationally was found using keywords (*induction*, *mentoring*, etc.) extracted from our research questions and initial literature results. Out of 153 abstracts, 81 articles were analyzed in their entirety; public documents (e.g., reports from research institutions and other entities) were also analyzed.

Quality Framework

Moving Toward, a mentoring/induction framework from the NTC (2018a), provided a structure for analyzing results from the present study. This model is a companion to the NTC's (2018b) *Mentor Practice Standards*, which focuses on "instructional mentoring" relative to three aspects: foundational (knowledge and skills "necessary for effective mentoring"), structural (partnership that supports "quality mentoring"), and instructional ("equitable classroom practice and student learning") (p. 2). Both the framework and standards are reflections of the NTC's partnership with schools and educational institutions in US states (Florida and others) that focus on optimizing quality mentoring to benefit teacher instruction and student learning. Young et al. (2017) collected data through mentor and teacher surveys, interviews, and NTC's assessment system, and "randomized controlled trials [were completed] with schools assigned to mentoring and control groups." The participating mentors had been trained by NTC to provide quality mentoring for 2 years to first- and second-year teachers. As found, eight quality practices supported teacher PD and retention and "improved student learning" (see NTC, 2018a): (1) "rigorous mentor/coach selection based on qualities of an effective mentor/coach," (2) "ongoing professional learning and feedback for mentors/coaches," (3) "sanctioned time for frequent mentor/coach–teacher interactions," (4) "ongoing support [of] multiyear

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mentoring/coaching [for] all educators," (5) "intensive and specific guidance moving student learning and teaching practice forward," (6) "professional teaching standards, content standards, and data-driven conversations," (7) "clear roles for and engagement with school leaders," and (8) "alignment and integration with broader improvement initiatives" (pp. 1–2). Applying this model, we consider our findings.

Definitions

Mentoring is defined, followed by induction. Definitions of both mentoring and induction apply to the particular mentoring/induction program under study. This initiative fulfills the criteria of being a formal program committed to PD and learning that is systemwide, complete with mentoring matches, training components, and induction activities.

Mentoring. While common understandings of mentoring and induction seem elusive in the literature, in Kram's (1983) classic US study *mentoring* is a developmental relationship that unites experienced and (relatively) inexperienced individuals who work together over time, provides career and psychosocial support, and offers mutual benefits. This voluntary or assigned dyad is steeped in professional values, expectations, and skills that infuse practice.

Formal mentoring is intentional and planned; participation is required and relationships are arranged (Ehrich, Hansford, & Tennent, 2004). The learning is reciprocal and focused on the mentee as a whole person, and possibly the transformation of an idea, organization, or profession (Mullen et al., 2022). Mentors are a vital resource for classroom management, lesson planning, and social–emotional

growth for students (Hobson, 2021). Teacher development and retention and student success are expected (Bullough, 2012).

Induction. *Induction*, as defined by Wong (2004), refers to "a systemwide, coherent, comprehensive training and support process that continues for 2 to 3 years and then seamlessly becomes part of the lifelong PD program of the district" (p. 42; also, Hobson, 2021). The process of induction occurs as a student transitions from preservice preparation to the first teaching position and a program of sustained support and PD (Bullough, 2012; Goldrick, Osta, Barlin, & Burn, 2012; Goldrick, 2016; Ingersoll & Smith, 2004; NTC, 2018a). Induction elements include "workload reduction," "supporting effective teacher behavior in the classroom," "supporting school enculturation," and/or "supporting PD" (Harmsen, Helms-Lorenz, Maulana, & van Veen, 2019, p. 260).

Features of SAC

A brief description of each SAC feature follows. This framework is relevant to the schools studied because it is foundational to formal mentoring/induction, signifies components of programming that embed expectations for all parties involved, and prioritizes instructional effectiveness in the classroom and as a goal of mentoring relationships. To clarify, the SAC model applies to the mentoring/induction program in the three elementary schools that were part of an established initiative that was comprehensive and division-wide. While this model was not explicated by the division or participants (because SAC is something we are naming herein), its features were all accounted for through structured activity (support), mentoring matches (access), and curriculum planning (collaboration).

Support. NTC (2018a) named support as one quality mentoring/induction practice. High-leverage activities (analyzing student work, common planning time, instructional strategies, two-way observations, etc.) propel new teachers' adaptation and learning (Goldrick, 2016; Ingersoll & Smith, 2004). Multifaceted opportunities (orientation, PLC, teacher cohort, etc.) aid socialization and enrichment and enhance mentoring (Mullen et al., 2022).

Accessibility. Accessibility in new teacher mentoring refers to mentor availability, in addition to services, resources, and opportunities (Ehrich et al., 2004). Mentors make themselves, their ideas, experiences, insights, and understanding available to their mentee; are honest and transparent so the new teacher feels encouraged to trust them; and are respectful while actively listening (Mullen et al., 2022). Tremendous support is needed to develop proficiency (Wong, 2004), so new teachers require mentors with certain aptitudes (willingness to mentor, etc.) who are a good match for them and their teaching subject(s). Criteria for such matches include personality, grade level, content area, proximity, and preferred identifications (race, gender, etc.) (Mullen et al., 2022). While mentoring naturally varies among new teaching staff in the same unit or team, mentor–mentee mismatches, poor access, and unmet needs can lead to discontent and attrition (Harmsen et al., 2019). Conditions that breed dissatisfaction or inequities can affect novices' progress and well-being (Lopez, 2013). Structures (policy, schedule, observation, etc.) that make mentoring accessible protect the investment in newcomers (Hobson, 2021; NTC, 2007).

Collaboration. Stakeholder collaboration is another quality mentoring/induction practice (NTC, 2018a). Responsibilities for principals, lead mentors, and others extend beyond arranging matches

(Mullen et al., 2022). When comprehensive programs allow novices time for collaboration, networking, and planning; reduced class sizes; and fewer lessons to prepare, the probability of turnover decreases and effective teaching increases (Harmsen et al., 2019; Hobson, 2021). Mentors collaboratively plan with their mentees and cultivate understanding of content, instructional planning, engagement, and assessment (Goldrick, 2016). "Collaborative mentorship" is oriented around practices that support equity and cultural responsiveness in classrooms with diverse populations (Lopez, 2013).

Trends in the Literature

Structural issues (e.g., working conditions) and interpersonal problems (e.g., poor matches) are sources of new teacher despair and attrition (Harmsen et al., 2019). A 2010 survey of new teachers in 31 US states and the District of Columbia revealed that 41% received little support with instructional planning and tools that only 15% considered useful (Mathews, 2011).

Responding to the problem of teacher turnover, mentoring programs have doubled in the past two decades (Furlow, 2019). Twenty-seven states required the participation of beginning teachers in mentoring/induction by 2011 (Goldrick et al., 2012). Participating school divisions turned to systemwide mentoring to combat teacher attrition (Mullen et al., 2022). NEA (2022) called for "mentoring by qualified mentors the first 2 years of teaching," indicating that "likely thousands of new teachers" are not prepared to meet student needs unless they have experienced "induction" in pandemic times. But teacher mentoring and matches can lack diversity. In North America, teachers are mainly white, despite working in increasingly diverse schools; this widening racial gap presents an equity problem on a

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broad scale, with Black and Latinx teachers less likely to remain in the profession than their white peers (Carver-Thomas, 2018; Lopez, 2013).

During COVID-19, some US school divisions relied on mentoring at a distance (Mullen et al., 2022; Mullen & Badger, in press). In March 2020, all K–12 schools in Virginia closed, later pivoting to remote teaching. Online teaching not only impacted how teachers delivered instruction but also how schools inducted new teachers. Starting their teaching at a chaotic time, novices had to quickly adjust to virtual instruction and unfamiliar instructional methods, without any face-to-face mentoring (Middleton, 2020).

Equity

Equity is a professional standard for just treatment (Lopez, 2013) and closing disparities (Galloway & Ishimaru, 2015). "Equity and cultural responsiveness" are expected dispositions of leaders, per the Professional Standards for Educational Leaders (National Policy Board for Educational Administration, 2015, p. 17). However, mentoring inequities in schools have been reported when matches are unsuitable or novices are not being observed by their mentors or discussing core instructional activities. Regarding these stark inequities, Kardos and Johnson (2010) learned from 374 new teachers' reports in 3 US states that inequities and inadequate access to mentoring were part of their induction experience, particularly within low socioeconomic schools and "math, science, and technology" contexts. An implication of this study was that attrition was a possible outcome, given the level of dissatisfaction expressed.

Equity is an area of effectiveness for principals that must be made explicit, asserted Rigby and Tredway (2015). Effective equity-oriented leaders are values-driven and move from rhetoric to action, which

serves to disrupt unfair practices; moreover, they cultivate conditions for leading and learning, inclusive decision making, and intentional actions to remedy inequities. Rigby and Tredway's Principal Leadership Rubric is directed at capacity-building for equity in the areas of commitment, advocacy, and leadership. While their theorizing attends to student learning and opportunities, adaptations seem possible for mentoring programs and teacher PD.

Teacher stress, particularly during a pandemic, undermines well-being and performance. Discontent fuels attrition (Harmsen et al., 2019), and lowers students' achievement and overall school effectiveness (Greenberg, Brown, & Abenavoli, 2016). Teacher induction/mentoring programs can help reduce stress for participating teachers and increase retention, which improves classroom instruction (Greenberg et al., 2016). Mentors and leaders who monitor new teacher stress signaled by negative affect and other behaviors can address productive strategies (e.g., coping skills, goal-setting, meditation) for managing stress through mentoring/induction programs and relationships. They are also being equity minded when job requirements are not excessive: "The impacts of teacher stress are particularly high in disadvantaged schools, making it a fundamental issue for reducing inequity in education" (Greenberg et al., 2016, p. 9).

Even in "normal" times, new teachers find teaching difficult and stressful (Dias-Lacy & Guirguis, 2017; Harmsen et al., 2019). Entering jobs with gaps in knowledge, they must still function independently as professionals. Beginning teachers' complaints target workload and inadequate guidance and resources for planning lessons. Modeling "pedagogical knowledge" and "behavior management" were also specified as needs by 10 teacher novices in Australia (Hudson, 2012),

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extending to timely assistance with key assessments and school policies (Ingersoll & Smith, 2004; Kratochwill, DeRoos, & Blair, 2011).

The first year of teaching is especially challenging (Ingersoll & Strong, 2011). Unfortunately, the disconnection between preservice teacher education and workplace demands perpetuates issues with classroom management, content, and culture. Inequity in new teacher mentoring occurs where access, services, resources, or opportunities are not properly distributed, and people are not treated fairly (Mullen et al., 2022). When imbalances or biases hinder relationships, work, or well-being, discontent can result (Harmsen et al., 2019; Lopez, 2013). As revealed from interviews with six US-based teachers during the crisis (Mullen et al., in press), online mentoring and leadership support were more difficult to sustain than in person. The rapid switch to computer-mediated interaction did not allow teachers to build relationships in the same way or consistently attract administrator assistance. The forced move to a virtual workplace reduced not only PD opportunities but also the level of support.

Managing the classroom and student behavior can seem overwhelming. A survey of 500 teachers found that novices reported problems with student behavior more than double that of experienced teachers (Kratochwill et al., 2011). Not feeling prepared to deal with the realities of teaching can lead to despair and attrition. Discrimination, exclusion, and other injustices can also be at the root of student and/or teacher problems (Carver-Thomas, 2018; Lopez, 2013). Teaching staff can process tensions and develop solutions by engaging in "critical understanding of equity and diversity, safe space and time to dialogue, [resource] sharing, reflection and agency, and skills and disposition" (Lopez, 2013, p. 11).

Examining a secondary school with a first-year and experienced teacher in Canada, Lopez (2013) addressed the gap on teacher effectiveness in diverse settings. Interviews focused on classroom diversity, diverse students and their needs, PD on "diversity and equity education," and teacher difficulty with and awareness of antiracist or multicultural education (p. 5). As conjectured, mentor–mentee dialogue creates "space to wrestle with tensions" and move beyond reductionist dynamics of "protégé and expert" (p. 3). Sources of tension for the interviewees were "race, racism, and whiteness" and risks associated with incorporating diversity and equity in teaching (p. 6). Lopez's Equity Awareness Development Process mapped the results as (a) "commit[ting] to equity, (b) "mov[ing] towards a deeper understanding of self," (c) "challeng[ing] power and the status quo," and (d) exercising "social action/agency" (p. 8).

Influence of the Principal

Effective principals ensure good teaching with a "lifelong, sustained PD program for the district or school" (Mullen et al., 2022; Wong, 2004, p. 41). However, some administrators merely assign newly hired teachers a mentor who may or may not live up to the expectations, as was discovered in North Carolina in 1995—out of every four new teachers, one got little or no support from their mentor (Wong, 2004). While it is unknown whether the research from 1995 is still representative of the US and world, as reported more recently in 2019, "[not all states offer] formal mentoring for new teachers" (Furlow, 2019). Further it seems likely that the pandemic has had a deleterious effect on mentoring and induction programs, and the support of new teachers, owing to school closures and ongoing disruptions (Mullen et al., 2022). Without administrative care, new teachers are twice as likely to leave their school or the profession (Carver-Thomas, 2018). It is no

surprise, then, that Kearney's (2019) investigation of six induction programs in Australia called for "bureaucratic oversight . . . to ensure that beginning teachers [develop as] professionals" (p. 142; Ehrich et al., 2004).

The principal's influence is undeniable—this is the often the first person novices meet and form a relationship with. Principals should not simply default to mentoring services but rather play an active role. Charged with attracting, training, and retaining staff, they are responsible for overseeing the work of new teachers and implementing ongoing PD (Ingersoll & May, 2011). Principals who visit classrooms to offer feedback and insight can positively influence retention. Based on reports from 393 beginning teachers in 70 secondary schools in the Netherlands, specific induction elements—reducing workloads and supporting enculturation—helped lower stress levels for those benefitting from administrative support (PD did not have an effect on causes of, or responses to, stress.) (Harmsen et al., 2019).

Methods

A literature review and data collection were completed for this study.

Data Collection

Analytic tool. The Moving Toward framework, developed by the NTC (2018a), served as an analytic tool for comparing our study findings to its quality mentoring/induction measures.

Research sites. Subsequent to approvals granted in June 2021 by the university's ethics board (protocol #21-498) and school division, self-reported data were collected in October from three consenting elementary (K–5, preK–5, and preK–6) schools in an urban area of northeast Virginia. These sites, all with mentoring programs, were

characterized by the central office as exhibiting strong leadership, using best practices, and retaining teachers. Student populations ranged from 400 to 600; 25 new teachers and 25 mentors (with 3, 10, and 12 mentees at each site) were in the division's program.

Study respondents. Ten practitioners completed our basic demographics survey: 4 mentor teachers, 3 principals, and 3 new teachers. The three novices had been in the program for 1 or 2 years. All but one novice and a principal were female. The teachers were white, and the principals were white, Asian, and Latinx. Math, reading, science, and social studies were taught. All respondents then engaged in audio-recorded 1:1 interviews (30–45 minutes) via Zoom.

Instrument design. We utilized a basic demographics survey and interview protocol. The survey elicited these specifics: gender, age range, ethnicity, education level, years in the classroom, grade level experience/years, certified content area(s), role (new teacher, mentor, or principal), and months/years in the role. The items specified in this tool anticipated the data needed for describing the three participant groups.

Our eight-item interview protocol (Table 1) was developed in light of the research questions and literature results, and aligned accordingly. In it, we asked: What does the mentoring program look like at your school? How has COVID-19 affected your experience of support? After four teachers (not respondents) piloted this tool, we tailored it to each role (new teacher, teacher mentor, and principal). Novices were asked about their commitment to stay at the school, and mentors about their work guiding mentees. Principals were queried about the mentor selection process.

Table 1.

New Teacher Mentoring Interview Protocol

New Teacher	Mentor	Principal
1. Describe the mentoring program.	1. Describe the mentoring program.	1. Describe the mentoring program.
2. What practices in this program shaped your experience?	2. What practices do you believe support the mentoring of new teachers?	2. What practices do you believe support the mentoring of new teachers?
3. What have you been learning?	3. What training did you receive?	3. What is your role in this program?
4. Has your experience informed your commitment to stay at the school?	4. In what ways does the principal support mentors?	4. What is your process for selecting mentors and creating matches?
5. What role does the principal play in your program?	5. How did you work with new teachers to support them in (a) learning the school culture? (b) creating positive relationships? (c) planning content lessons? (d) managing the classroom?	5. What might you change about the mentoring process in your school?
6. Has your mentor helped you in the program?	6. What might you change about mentoring teachers?	6. What outcomes would you like to see for new teachers?
7. What might you change or add to the program?	7. What might you like to share about the mentoring of novices?	7. What might you like to share about the mentoring of novices?
8. Has COVID-19 affected your experience of support in this program?	8. Has COVID-19 affected your experience of support in this program?	8. Has COVID-19 affected your experience of support in this program?

Data analysis. Study materials were analyzed, and detailed coding was used to determine themes and generate findings (Yin, 2018). Predetermined codes were culled from the research questions, review of sources relative to our search terms and results ("Relevant Literature" section), and instruments. The deductive coding process involved the use of such codes as *induction* and *mentoring* in relation to *elementary school* sites during *COVID-19* relative to *feature/component (support, accessibility,* and *collaboration), leadership/principal, program,* and *student achievement/learning/success.* During the inductive coding

process, we identified *equity, limiting, relationship, stress, struggle*, and *virtual/remote* as codes.

All survey and interview data were organized in Microsoft Excel spreadsheets, color coded, and categorically grouped around codes. Columns were labeled with survey or interview prompts and rows with school and participant numbers, with responses added. All identifiers (division, county, school, and program and individual names) were stripped from the raw data; schools were assigned a letter (A, B, or C) and participants at each location a number (e.g., A/NT1 denoted new teacher 1 at A school).

Deductive and inductive coding was used to analyze both the transcription and survey data to ensure completeness and accuracy. In six data sessions, the two researchers compared independent coding. The results were then compared with three peer reviewers'; these teacher mentors independently coded all data using the predetermined codes. To clarify our process of arriving at 100% interrater reliability and meaningful themes, we (a) worked from a design congruent with Moving Toward; (b) completed member checking on transcribed records; (c) extracted codes from our research materials; (d) independently coded participant responses and quotations; (e) confirmed the cogency of predetermined codes; created inductive codes; (f) compared initial results, discovered themes, and developed interpretations; and (g) enacted intercoder checks via peer reviewers.

Limitations/Delimitations

The sample size was smaller than planned due to COVID-19 restrictions and limited to a white teacher sample within a single school division. Following the hold on interviewing, we were allowed

only to engage electronically, which altered the plan to interview 45 practitioners in person. The results are not generalizable. Additionally, the reliance on practitioner perspective restricted data-gathering to self-reports and excluded other stakeholders' views. As a delimitation, key players involved in mentoring in pandemic-burdened places offered their time and narrated experiences. While validity was sought through the literature and peer review, more research is needed to confirm the protocol and findings. However, our discussion of SACE offers a promising addition to the literature that warrants further research.

Findings

Regarding how the program affected novices' ability to adapt and progress in a crisis, we present seven findings linked to the research questions. These themes are descriptive in nature and consistent with the literature analyzed. The "Discussion and Implications" section offers a more interpretive take on the SAC features as animated by participants and our theorizing around the meanings. Summaries of responses with evidence follow; phrases in quotation marks belong to participants.

The Program Was Valued and Endorsed

The mentoring reported in the coded data varied, and some participants endorsed the program. New teacher mentoring was described as a long-standing, district-led program that was adapted in pandemic times. Expectations of parties during the 2020–2021 crisis timeline involved (a) participation in the 4-day orientation; (b) oversight and mentor training by a lead mentor; (c) assignment of novices to a mentor; (d) mentor identification by principals using criteria: strong "instructional practice and communication skills,"

"characteristics like willingness to work hard," and experience at the novice's grade level; (e) mentor daily check-ins and weekly sessions airing mentees' questions; (f) "topic generation by mentors that applied to teachers across grade levels" (parent–teacher conferences, etc.); (g) novice socialization within grade-level teams that promoted "collaborative learning"; (h) PLC support of novices by mentors, instructional coaches, and administrators; and (i) PD activities (mentoring modules, etc.) and informal gatherings.

Leadership Was Important

Leadership encompassed principals, mentors, and the division. Principals reported having (a) fulfilled tasks as the leader (mentoring assignments and matches, etc.), (b) exercised quality control (sponsoring program orientation, monitoring matches, checking in with lead mentors, etc.), (c) encouraged mentor–mentee consultation to support novices, and (d) invested in mentoring scaffolds (matches, orientations, PD, PLCs, training, etc.). Besides developing teachers, principals said that they conveyed expectations about the program and responsibilities. In consultation with the division, they oversaw mentor training and support onsite to ensure that mentees were empowered to "grow within their roles." Having "the best-suited person for the mentor role" and "supporting mentors as they work to support mentees" were important.

Mentors had access to principals and reported program supports in action, as well as principal interest in whether their mentor–mentee relationships had clicked. One mentor recognized mentors for contributions to the "pandemic" program. Teacher mentors described lead mentors as having sought "mentors' input on a good fit for novices" and "work[ing] with them to [forge] good pairings." These leads also "checked in with the principal on the matches."

To the new teachers, the school leader's role was to ensure they felt supported and were gaining familiarity with routines and curriculum and instruction. Two of the three novices felt comfortable asking their principals questions, noting that their needs were addressed.

COVID-19 Impacted Mentoring in Virtual Workplaces

Impacting program integrity with respect to SAC, the pandemic proved taxing for stakeholders. The new teachers encountered the virtual workplace on the heels of their online student teaching experience (in 2020), later having to pivot to in-person teaching. The third novice (who experienced negative mentoring) was further along at the school, having started in person, but the switch to online instruction was unsettling. Working remotely made it difficult for the novices and mentors to collaborate in their grade-level teams. Not meeting face-to-face was stressful, even with the initial relationship-building afforded by "ice breakers."

Mentors, too, attested to these complexities of guiding novices' adjustment to working online: "It was much harder doing [teaching observations] virtually"; "we had to mentor someone virtually who was learning to teach virtually"; "struggling with learning how to teach in a new way, we still tried to support novices—they did a great job, but it was challenging"; "the pandemic limited the time for collaboration"; and the "observations [and other mentoring activities] we did in the past were more powerful."

Struggle with online instruction permeated remote mentoring. As mentors put it, "The relationship is not built in the same way in virtual instruction"; "staff meetings, happy hours, and gatherings make novices feel part of the community." *Limiting*, *relationship*, *stress*, *struggle*, and *virtual/remote* were frequently used by mentors. To

principals, the "added responsibilities of monitoring, masking, separating everyone, and building relationships" constrained the program and burdened their roles.

Consistency and Fidelity Were Expected

Mentors all said they supported their mentee by scheduling time to meet, planning for discussion and questions, and checking in regularly. Every effort was made to welcome mentees, get to know them, and facilitate success. Mentor behaviors were inconsistently executed, however, based on others' responses.

Concerning new teacher support, principals revealed that when planning for mentee needs, more time must be allowed to find best-fit mentors. They saw positive, productive matches as a priority for the program. Arranging for mentees and mentors to frequently meet also needed attention in future schedules. When not on the same grade level, program fidelity was affected. One principal's idea was to have mentoring parties meet with "grade-level teachers at other schools to [share] similarities and obstacles." This thought was sparked by the principal's concern that not all mentees had been assigned grade-level mentors in the building and that mentors could benefit from brainstorming.

Two novices stated that their mentor offered "frequent check-ins, weekly meetings, resources, and questions." Having a "go-to" with whom to plan and talk about teaching facilitated their adjustment. Friendships even formed. For the third novice, her mentor's alternative placement made their mentoring arrangement untenable.

Fidelity and consistency could be improved in other ways too. Mentors called for more district support, including financial compensation as a signal of employer loyalty to veteran teachers' labor and dedication to

the profession through new teacher support. While one mentor saw the program as "exceptional," administration was still expected to demonstrate value. The need for mentee fidelity to evidence-based, student-centered programs (Responsive Classroom, etc.) for developing pedagogical expertise was another point. To the principals, securing mentee "comfort with resources, instructional planning, progress monitoring, and training on assessment systems" would have solidified outcomes.

Relationship-Building in a Positive Culture Was Encouraged

Without exception, participants shared that "face-to-face connections really matter" and "relationship-building is difficult in virtual settings." A mentor added that, with the protracted global crisis, "new teachers are overwhelmed working through all the changes." Principals noted that "while novices often feel isolated, they need to be part of a collaborative, nurturing environment." One novice appreciated that her mentor held space "for questions or venting."

One principal believed all novices should "becom[e] part of the culture and figure out if a school is the right fit." Interestingly, the mentoring program had a positive effect on two novices who seemed inclined to remain at the school: "I want the teachers coming in the future to feel they belong." Considering how the program can change, one novice imagined meeting with fellow novice teachers to "talk about how things are going without veteran teachers present in a judgment-free zone," while the other hoped the "support continues." The third novice declined responding in these two instances.

Mentoring Support Could Have Been More Equitable

Participants recognized the need for equitable support in the onsite program, albeit by implication. One mentor remarked, "All mentors

should constantly meet with mentees and implement strategies to support them." Principals also deemed the mentoring and gains to be uneven, perhaps unfair at times, as did the mentees. Just because SAC occurred in ways that were beneficial in some cases does not mean that it is acceptable for a newcomer to be overlooked in a mentoring program or mentors' extra duties to forgo compensation were expectations that had fallen short. For such reasons as these, the program did not uniformly demonstrate consistency and fidelity.

Fairness in mentoring support was raised as an issue (without using the word *fair*). For example, as disclosed by novices, mentors, and principals alike, accessibility was problematic. Of note, the two satisfied novices observed inequity beyond their dyads: "Some mentors don't meet every week with their mentees." The dissatisfied mentee wished she had had a grade-level team to offset the unreliable mentoring. Novices alluded to mentoring inequities within and beyond their school.

Teachers and principals' shared outcomes they would like to see for novices: (a) mentor teachers should connect often with mentees and give feedback, (b) novices should have access to mentors and frequent face-to-face dialogue and activities, and (c) principals should appropriately match mentees with mentors (subject-matter expertise, dispositions, etc.) and monitor matches and grade-level teams.

Mentoring was not equitable for the same-race teacher novices (all white). Considering that discrepancies did not arise from racial bias, they may have been related to the restrictions on in-person education, exclusive use of virtual platforms, technology problems, mentoring mismatches, interpersonal tensions, or managerial overwhelm. Consequently, access, resources, and opportunities differed. Although the character of mentoring can vary across pairs, intentional design

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and viable matches are nonnegotiable for supporting every new teacher.

SAC Features Were Animated

The coded data revealed three program features influencing mentoring quality and stakeholders' experience. As previously stated, not every novice was the beneficiary of the mentoring feature *support*, which is on par with pandemic-induced national trends (NEA, 2022). SAC was directly experienced or considered beneficial by two (of three) new teachers.

Research participants animated the potential and power of SAC based on their role, experience, and observation, but across professional roles, reservations were expressed. All three novices observed onsite mentoring and PD activity. While two felt supported by their mentor and grade-level team, the third (the only preK teacher on her team) received little attention. Assigned a mentor at another school, "without weekly meetings," she relied on personal contacts.

Teacher mentors saw the program as an opportunity to guide and collaborate with mentees and provide support, strategize, and discuss challenges. They viewed "contextual clarity" and "professional knowledge" as mentoring capital they uniquely offered. Principals described their program as fostering connections and resources to benefit the novices, whom they said were allocated time to meet, bond, and solve problems with their mentors and teams.

Like the disclosure forthcoming from mentors, not all met with their mentees as expected. In contrast, a satisfied novice said, "My fifth-grade mentor is doing an amazing job," describing this individual as communicative, informed, and generous with feedback. The other mentee relied on her mentor "for parent–teacher conferences" and

learned from the types of "questions" she posed; the mentor's "open door" policy was appreciated.

Mentors similarly accentuated the value of their mentoring support. They saw themselves as available to discuss anything with their mentees: "I'm here to guide and direct my mentee"; "we regularly meet to see how I can give support"; "my mentee check-ins occur throughout the week"; and "individual mentoring occurs pretty much daily." One mentor concentrated on goal-setting and "helping with instruction, management, and feeling welcomed." Based on all testimonials, two mentors built positive relationships with their mentees. These veteran teachers helped their mentees acclimate to the school culture, and they attended to their social-emotional needs and shared instructional resources and strategies.

The lead mentor was also an asset. Mentors explained, "The lead mentor who oversees the mentors is just down the hall" and "our lead mentor offers me support." A lead mentor confirmed such services: "I guide the mentors and provide mentor training, and we meet once a quarter." Mentors valued the "required course on mentoring new teachers" and "mentor training from the division and school [which] contributed positively to our mentoring." By participating in whole-group activities like the PLCs lead mentors also guided acculturation.

Two novices believed their mentors were invested in their success, and one appreciated her mentor's receptivity: "I can ask anything, anytime." The other benefited from critical thinking and problem solving. Both mentors initiated discussion on topics and invited mentee input. The third novice noticed that her mentor was "too busy to touch base."

Principals discussed their support of the program, which included giving constructive feedback, affirming novices, and creating safe spaces to encourage questions. They expected mentors to offer expertise and services through personalized SAC. Grade-level teams and administrators met (bi)weekly to plan, analyze data, prepare lessons, create objectives, and discuss students' needs.

To reinforce a crucial point, inequities in the mentored support were articulated beyond the novice teacher who had perceived and experienced it. Indeed, most of the other novices, mentors, and principals also drew attention to systemic challenges, such as technology-encumbered induction, and program discrepancies, such as irregularity in mentor availability.

Discussion and Implications

About the Moving Toward framework, we propose corresponding findings from our investigation, as well as a few issues extending the scope of analysis:

(1) Inequities in mentor selection were based on the performance of this role as observed by all principals and teachers, indicating that rigor and monitoring were needed for accessibility to healthy, viable matches; steadfast mentoring support; and meaningful collaboration.

(2) PD, training, and administrative support for mentors were provided to some extent but strictly virtually.

(3) While time was sanctioned for mentoring interactions, mentors differed in the performance of their duties.

(4) In the crisis, this program had some momentum, but participants missed face-to-face interaction. Their e-relationships were not as intense, and mentoring activities (teaching observations/conferencing, etc.) were performed less frequently.

(5) Guidance and feedback helped two of the novices move their teaching forward, and grade-level teams and PLCs offered mentoring parties more value.

(6) An unknown was the extent to which mentoring matches organized around content, grade level, access, and personality satisfied the Virginia Board of Education's (2021) "teacher performance standards," such as "culturally responsive teaching and equitable practices" (p. 8). New teacher PD was implemented despite the emergency, albeit remotely and on video.

(7) School administration's program guidelines from the division clarified the roles and responsibilities of all parties, which were explained at the orientation.

(8) Stakeholder collaboration occurred at a reduced level and within the schools' PLCs (e.g., mentoring pairs conferenced with parents). Collaborative engagement and intersections with "broader improvement initiatives" were otherwise unknown.

According to the literature reviewed, SAC supports PD and school culture while managing some of the challenges that drive away teachers. A key takeaway is that we add to the school-based research on SAC—not by echoing a set of features for mentoring/inducting that have already been established as program pillars but by calling for

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equity in a revised model, SACE, which is aligned with professional standards and equity research. The ideas proposed are for equity to be (a) accepted as a fourth component of new teacher mentoring programs and (b) dynamically embedded in the recognized features. As shown in Figure 1, SACE is potentially useful as a contemporary analytic device for understanding mentoring/induction situations from an equity lens. Equity involves equitable support, access, and collaboration, as well as treatment, resources, and opportunity to learn, contribute, and succeed. To emphasize the importance of equity, it is at the center of our model, with support, accessibility, and collaboration circling it.

Figure 1. *Support–Accessibility–Collaboration–Equity (SACE) Framework*

From this perspective, equity—centered in theory, research, and practice—is neither conceived nor treated as a program add-on but instead as a principle that re-centers mentoring/induction. Infused throughout processes, equity issues—such as poor matches, unavailable mentors, or ineffectual mentoring—would be detected and resolved in a timely manner. However, equity is all-too-rarely addressed, at least in the context of the studies reviewed and the program features reported by the Virginia elementary stakeholders. An implication is that equity has yet to become wholly integrated in

mentoring/induction. As theorized, equity enhances the capacity of the established components and empowers vulnerable parties and invested stakeholders.

Although equity was a resounding issue for one participant, it could not be addressed fully using either SAC or Moving Toward. While SAC is required for effective mentoring and induction, without equity, the three constructs fall short. Thus, the addition of equity seems vital for fully realizing the goals of sustained intervention. Although this study was not designed to gauge program effectiveness, besides the SAC and SACE constructs, Moving Toward served as a way to view our findings. Overall, variability in the quality of mentoring/induction was evident in the data analyzed. In the state of emergency, the three schools showed some level of support for new teacher development and learning, but not evenly or to everyone's satisfaction.

Conclusion

Besides offering study of mentoring during the pandemic in this article, our original scholarly contribution centers on the introduction of SACE for examining formal mentoring/induction and making programs equitable. What makes this research stand out is that SAC, as interpreted, revealed the need for equity-embedded programming that upholds consistency and fidelity. This understanding arose from the findings, which presented a mixed picture of the mentoring program and need for parity in cultivating a culture of support for teaching staff. Accordingly, SACE calls for close monitoring of programs that brings intent, design, implementation, assessment, and impact into line with equity.

Other schools can benefit from program delivery that reflects consistency and fidelity in the face of obstacles and controlling for

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equity as a systemic component of mentoring/induction. We encourage divisions to (a) champion success in SACE-driven programs enacted with fidelity and consistency; (b) provide relationship-building opportunities that develop and retain quality teachers; (c) ensure that processes are fair and outcomes achieved; and (d) offer intermittent feedback that informs learning. To maximize mentoring benefits for all involved, administrators are advised to know the research, attain "program support," and oversee processes and "evaluations" (Ehrich et al., 2004).

Finally, the elementary practitioners in our study identified program features influencing mentoring quality and their experience in a crisis. While the components evidenced in the literature were in play in the pandemic-burdened school milieu we researched, the published sources did not account for equity as a program feature per se. Raising the issue of equity in mentoring contexts is meant to spark reflection and theorizing, and inform action. The program did show movement toward comprehensive approaches that supported new teachers in a crisis, but as reported by insiders, the quality was variable and equity was in question. Yet, equity enacted intentionally (Galloway & Ishimaru, 2015; Lopez, 2013; Rigby & Tredway, 2015) enriches knowledge and advances programs. It is time for equity to be widely recognized as a vital feature of formal mentoring/induction, which is a direction for future research and program improvement. When deliberately supportive, accessible, collaborative, and equitable, mentoring can better sustain teachers.

Acknowledgment

References

Bullough, R. V. (2012). Mentoring and new teacher induction in the United States: A review and analysis of current practices. *Mentoring & Tutoring, 20*(1), 57–74.

Carver-Thomas, D. (2018). *Diversifying the teaching profession: How to recruit and retain teachers of color.* Retrieved from https://learningpolicyinstitute.org/product/diversifying-teaching-profession

Ehrich, L. C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly, 40* (4), 518-540.

Furlow, G. (2019). All new teachers need mentoring programs. *TeacherReady*. Retrieved from https://www.teacherready.org/new-teachers-mentoring-programs

Galloway, M. K., & Ishimaru, A. M. (2015). Radical recentering: Equity in educational leadership standards. *Educational Administration Quarterly, 51*(3), 372–408.

Goldrick, L., Osta, D., Barlin, D., & Burn, J. (2012). *Review of state policies on teacher induction*. Retrieved from https://core.ac.uk/download/pdf/71357418.pdf

Goldrick, L. (2016). *Support from the start: A 50-state review of policies on new educator induction and mentoring.* Retrieved from https://studentsatthecenterhub.org/resource/support-from-the-start-a-50-state-review-of-policies-on-new-educator-induction-and-mentoring

Greenberg, M. T., Brown, J. L., & Abenavoli, R. M. (2016). *Teacher stress and health*. Retrieved from https://www.rwjf.org/en/library/research/2016/07/teacher-stress-and-health.html

Harmsen, R., Helms-Lorenz, M., Maulana, R., & van Veen, K. (2019). The longitudinal effects of induction on beginning teachers' stress. *British Journal of Educational Psychology, 89*(2), 259–287.

Haverback, H. R. (2020). Middle level teachers quarantine, teach, and increase self-efficacy beliefs: Using theory to build practice during COVID-19. *Middle Grades Review, 6*(2), 1–6.

Hobson, A. J. (2021). Bringing mentoring ONSIDE: Averting judgementoring and enhancing the professional learning, development, and well-being of teachers. In E. H. Reames & L. J. Searby (Eds.), *The art and science of mentoring* (pp. 49–74). Charlotte, NC: Information Age.

Hudson, P. (2012). How can schools support beginning teachers? A call for timely induction and mentoring for effective teaching. *Australian Journal of Teacher Education, 37*(7), 71–84.

Ingersoll, R. M., & May, H. (2011). *Recruitment, retention, and the minority teacher shortage*. Retrieved from https://repository.upenn.edu/cgi/viewcontent.cgi?article=1232 &context=gse_pubs

Ingersoll, R. M., & Smith, T. (2004). Do teacher induction and mentoring matter? *NASSP Bulletin, 88*(638), 28–40.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research, 81* (2), 201–233.

Kardos, S. M., & Johnson, S. M. (2010). New teachers' experiences of mentoring: The good, the bad, and the inequity. *Journal of Educational Change, 11*(1), 23–44.

Kearney, S. (2019). The challenges of beginning teacher induction: A collective case study. *Teaching Education, 32*(2), 142–158.

Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal, 26*, 608–625.

Kratochwill, T. R., DeRoos, R., & Blair, S. (2011). *Classroom management module.* Retrieved from http://www.apa.org/education/k12/classroom-mgmt.aspx

Lopez, A. E. (2013). Collaborative mentorship: A mentoring approach to support and sustain teachers for equity and diversity. *Mentoring & Tutoring, 21*(3), 292–311.

Mathews, J. (2011, December 18). New teacher decries lesson plan gap. *The Washington Post*. Retrieved from https://www.washingtonpost.com/blogs/class-struggle/post/new-teacher-decries-lesson-plan-gap/2011/12/17/gIQAt0C50O_blog.html

Middleton, K. V. (2020). The longer-term impact of COVID-19 on K–12 student learning and assessment. *Educational Measurement*, *39*(3), 41–44.

Mullen, C. A., Fitzhugh, G. II, & Hobson, A. J. (2022). District-wide mentoring: Using Kram's model to support educators. *Kappa Delta Pi Record, 58*(1), 26–31.

Mullen, C. A., & Badger, S. C. (in press). Leadership support in pandemic: Middle school teacher perceptions of emergency remote teaching. *Research in Middle Level Education*.

National Education Association. (2022). *Supporting teacher induction and mentoring programs in light of COVID-19*. Retrieved from https://www.nea.org/professional-excellence/student-engagement/tools-tips/supporting-teacher-induction-and-mentoring

National Policy Board for Educational Administration. (2015). *Professional standards for educational leaders*. Retrieved from https://www.npbea.org/wp-content/uploads/2017/06/Professional-Standards-for-Educational-Leaders_2015.pdf

New Teacher Center. (2007). *The costs and benefits of a comprehensive induction program*. Research Brief. Retrieved from https://www.gwaea.org/app/uploads/sites/19/2021/08/BRF.pdf

New Teacher Center. (2018a). *High quality mentoring and instructional coaching practices.* Resource. Retrieved from https://newteachercenter.org/wp-content/uploads/2021/07/High-Quality-Mentoring-Instructional-Coaching-Practices_RB21.pdf

New Teacher Center. (2018b). *Mentor practice standards*. Retrieved from https://newteachercenter.org/wp-content/uploads/2021/07/Mentor-Practice-Standards_RB21.pdf

Rigby, J. G., & Tredway, L. (2015). Actions matter: How school leaders enact equity principles. In M. Khalifa, N. Witherspoon Arnold, A. F. Osanloo, & C. M. Grant (Eds.), *Handbook of urban educational leadership* (pp. 329–347). Lanham, MD: Rowman & Littlefield.

Sasson, I., Kalir, D., & Malkinson, N. (2020). The role of pedagogical practices in novice teachers' work. *European Journal of Educational Research, 9*(1), 457–469.

Smith, T., & Ingersoll, R. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal, 41*(3), 681–714.

Virginia Board of Education. (2021). *Guidelines for uniform performance standards and evaluation criteria for teachers*. Retrieved from https://www.doe.virginia.gov/teaching/performance_evaluation/teacher/index.shtml

Wong, H. K. (2004). Induction programs that keep new teachers teaching and improving. *NASSP Bulletin, 88*(638), 41–58.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage.

Young, V. M., Schmidt, R., Wang, H., Cassidy, L., & Laguarda, K. (2017). *A comprehensive model of teacher induction: Implementation and impact on teachers and students*. Report. Retrieved from https://newteachercenter.org/wp-content/uploads/2021/07/NTC-i3-Validation-Comprehensive-Report-with-App_Final.pdf

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