Inquiries and Innovations



Matt Albert holds a PhD in Curriculum and Instruction with an emphasis in literacy from the University of Nevada, Las Vegas. He has been a middle and high school ELA teacher since 2008, with most of his career spent in Las Vegas schools. He currently teaches sixth-grade English at The Meadows School and also serves as a part-time instructor of secondary education ELA methods at the University of Nevada, Las Vegas. He can be reached at alberm4@unlv. nevada.edu.

Chyllis E. Scott, PhD, is an Associate Professor of Literacy Education at the University of Nevada, Las Vegas, in the Department of Teaching and Learning. Her research focuses on content area and disciplinary literacy, academic writing, and mentoring practices for preservice and inservice teachers and students in higher education. She can be reached at chyllis.scott@unlv.edu.

Abstract: Education continues to diversify with the growth of schools and the influx of beginning teachers. The increased presence of beginning teachers emphasizes the need for teacher-mentoring. This systematic review examined what research shows about training and preparation of teacher-mentors in high school education, revealing three themes: mentor services, mentor training, and where to begin mentor training. Key findings state that while significant amounts of research has been conducted on the support mentor teachers provide to mentees, there is limited research on how mentors are trained. Finally, recommendations and implications for further research on teacher-mentor training are provided.

Keywords: novice teachers, teacher mentoring, mentor training, charter schools, systematic review

constant source of debate in education focuses on "meeting needs and improving choice and the Limplications for institutional collaboration" (Lumby & Wilson, 2003, p. 536). To meet the needs of beginning teachers (BTs), "the number of induction programs also has grown considerably. The percentage of BTs who report that they participated in some kind of induction program in their 1st year of teaching has steadily increased in recent decades" (Ingersoll, 2012, pp. 49-50). Since the 1980s, school administrators have sought to improve the retention of BTs by developing "mentoring" plans (separate from induction programs) with experienced teachers helping BTs traverse various demands (e.g., instruction, assessment, and 1st year teaching support) of the school year. Within this issue of retention, "teacher turnover" and "attrition" are educational buzzwords calling attention to the struggle of keeping BTs in the classroom instead of losing them after just a few years (Carver-Thomas & Darling-Hammond, 2017).

Beginning teachers start their careers with a variety of personal and professional needs. If not met, nearly 40–50% of these teachers will leave the profession within the first 5 years (Ingersoll & Smith, 2003; Neason, 2014). As researchers (Alemdag & Erdem, 2017; Mukeredzi & Manwa, 2019) continue to focus on how mentors fulfill the needs of mentees, it is clear some programs (Helfeldt et al., 2015; Pogodzinski et al., 2013) are more successful in supporting mentees than others.

Complicating matters further is the rise in popularity of state-sponsored charter schools across the United States. Public charter high schools attract higher amounts of BTs (Center on Reinventing Public Education, 2010) and often cannot meet the salary demands of quality, experienced teachers (Perennial Resources International, 2020). Therefore, charter schools have additional pressure to make sure teachers are prepared to perform at exceptional levels. Mentoring is arguably more critical in the charter school setting and imperative for BTs to reach proficiency in a shorter amount of time than what would be expected in traditional public schools.

Given these realities, this systematic review was guided by the following research question: What does research, published from 2010 to 2020, tell us about the training of teacher-mentors in public charter schools? To clarify, not all state-sponsored public charter schools operate in the same way; therefore, we conceptualized "state-sponsored public charter" as an independently autonomous public school that receives state funding, potentially less funding than a traditional public school (Mulholland, 1996).

Rationale for Review

Studies on BT induction programs originated in the 1980s (Feiman-Nemser, 1983; Wildman et al., 1989). These programs are especially critical in affecting a BT's decision to return to the classroom after the 1st year (Ingersoll & Smith, 2004). Since their inception, induction programs for the newest teachers in the profession have varied considerably in their approaches and aims.

Wang and Odell (2002) conducted a review of literature on induction programs and found most programs fell into one of three perspectives: humanistic, situated apprentice, and critical constructivist. They defined the humanistic perspective as "psychological and emotional support" for BTs (p. 493). The apprentice perspective focused on how BTs "develop ... necessary practical knowledge for teaching" from mentors (p. 496), and the critical constructivist perspective emphasized teaching for social justice in response to "dissatisfaction with existing teacher knowledge" (p. 497).

As more studies (i.e., Bickmore, D. & Bickmore, 2010; Hennissen et al., 2011) focused on the services offered to BTs within their induction programs, minimal research was published on how teacher-mentors were trained to offer and provide such services. The dearth became so noticeable that Wang et al. (2008) conducted a review and offered the following four findings to drive further research:

[BTs] have a variety of needs when they start teaching.
 Meeting all these goals in an induction program
 requires new ways of thinking about "the dispositions
 and skills that mentors need to influence [BTs']
 learning and teaching" (p. 146).

- Wide variations in preservice programs require deeper research to determine "what preservice preparation is useful for learning to teach in various induction contexts" (p. 147).
- It is crucial to understand "components of teacher induction will not be effective in supporting [BTs'] learning without building their knowledge of effective teaching based on national standards" (p. 147).
- More research is needed on how mentor training addresses the idea that "[BTs'] initial beliefs and teaching practices play an important role in shaping, impeding, or facilitating what and how they learn in induction contexts" (p. 147).

Relative to this review, the above suggestions can be framed in terms of mentor training, separate from induction. Induction programs may include mentoring, but they also include extra responsibilities such as conferences with administrators and meetings with departmental colleagues (Ingersoll, 2012). These experiences are not interchangeable with receiving systematic, continuous support from an experienced teacher. Consequently, school administrators and teacher-mentors need to make deliberate decisions about the structure of mentoring programs to meet mentees' significant amounts of both personal and professional needs.

Method

The systematic literature review (e.g., Hannes et al., 2007; Risko et al., 2008; Scott et al., 2018) approach was used to evaluate and synthesize the findings associated with the mentoring, specifically the training and preparation of teacher-mentors. Thus, we applied a three-step process: (a) searching and identifying articles, (b) multistep screening using *a priori* inclusionary criteria, and (c) qualitatively synthesizing the inclusionary studies (Guo et al., 2020; Risko et al., 2008; Scott & Miller, 2016). While traditional literature reviews provide researchers with an overall view, a systematic review provides a more in-depth analysis of the research (e.g., Hannes et al., 2007; Scott, 2013; Scott et al., 2018; Scott & Miller, 2016) related to the research topic.

Literature Search

Following the systematic approach, searches employed three electronic databases: ERIC (Education Resources Information Center), Education Full Text, and Professional Development Collection. Searches were performed with the following terms: *mentoring programs, new teachers, BTs, novice teachers, teacher burnout, high school, teacher mentoring, training, teacher retention,* and *charter schools.*

Inclusionary Criteria

For this research, preference was given both to (a) empirical, peer-reviewed articles published between January 2010 to April 2020 and (b) research that focused on a mentor-mentee relationship with explicit focus on mentor training and mentor programs in public charter high schools. We determined the search year range by recognizing that 10 years provided a focused time frame, with direct references and outcomes of current research trends. Using the systematic parameters, 540 articles underwent a multistep screening. Initially, all 540 abstracts were screened applying inclusionary criteria: (a) characterized as empirical research, (b) published in a peer-reviewed journal, (c) published between 2010 and 2020, (d) conducted in charter high schools, (e) examined research on a mentor-mentee relationship, (f) addressed mentor training; and (g) focused on mentors. After completing the abstract-level screening, 27 articles were identified and screened at the full-text level.

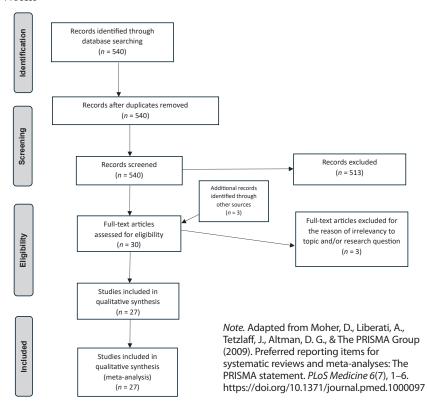
Additionally, to broaden the scope of the research and inclusionary articles, an ancestral search was performed that yielded 1,228 citations. An additional 81 abstracts were screened at the abstract-level applying the criteria

from the initial data collection. At the abstract-level, three articles met the inclusionary criteria. A total of 30 articles were moved forward to full-text screening (see Figure 1 for inclusionary process). However, during the full-text screening process, three articles were eliminated due to lack of relevance not evident during the abstract-level screening, leaving 27 articles for final review.

Analysis

Twenty-seven inclusionary studies were synthesized using deductive and inductive coding (Strauss, 1987) in order to ascertain commonalities existing across studies (Hall, 2005). Deductive codes were developed based on the recommendations of Wang et al. (2008), including: mentors learning about BTs beliefs on education and learning, mentors learning about how to focus on instructional practices relative to national standards, mentors learning about how to cultivate relationships with mentees, and mentors learning instructional skills required for BTs. Based on the rereadings of the 27 studies, the previous set of codes was deemed inadequate for covering the nuances the data contained. Inductive codes were developed to bolster the analysis (Strauss, 1987). For example, in studies where mentors did not

Figure 1. Inclusionary Process



receive explicit training but still provided services to mentees, a series of codes were developed to categorize specific services (e.g., classroom management/day-to-day basics such as "survival skills," collaboration with colleagues, and cultural competence). Subsequently, codes were developed to capture how often mentormentee dynamics were one-sided versus how often they were give-and-take (see Table 1).

Notably, some studies depicting no explicit mentor training were still included in this review primarily to demonstrate a substantial lack of research devoted solely to how mentors are trained. These studies were deemed relevant because they captured the broad scope of what mentors do. Although very few articles addressed the direct focus of the research question pertaining to mentoring programs in charter schools, this study is of value and provides a foundation for this research.

Results

After the systematic retrieval, screening, and coding processes were completed, the 27 studies were analyzed for various descriptive characteristics and synthesized into emergent themes to determine the trends of the research on teacher-mentor preparation from 2010 to 2020. This is a crucial step to the systematic literature review process, which involves a qualitative classification of the common themes pertaining to the research foci (Scott & Miller, 2016).

Descriptive Characteristics

Although the setting focus was education, characteristics of the 27 studies differed. Therefore, we evaluated how each study described its participants and setting, mentoring practices and training, and research methodology.

Table 1. Characteristics of Identified Studies

	%	n
Any mention of explicit evidence of systematic mentor training	37	10
Recruitment of mentors	22	6
Mentor viewed strictly as resources dispensing knowledge to beginning teachers	81	22
Mentor viewed as learner during induction process	22	6
Services offered by mentors and induction programs		
Reflecting on beginning teacher beliefs related to education and learning	33	9
Reflecting on beginning teacher beliefs related to mentoring	56	15
Basic professional duties (classroom management, school policies, etc.)	63	17
Research-based discussion on effective teaching practices	74	20
Formal opportunities to build positive school climate	41	11
Skills on fostering professional relationships with students	33	9
Consistent give and take exchanges between mentor-mentee	63	17
One-sided exchanges between mentor-mentee	19	5
Cultural competence training	19	5
Mentor preparation needs		
Mentors learning about beginning teacher beliefs on education and	7	2
learning		
Mentors learning about how to focus on instructional practices relative to	4	1
national standards		
Mentors learning about how to cultivate relationships with mentees	22	6
Mentors learning instructional skills required for beginning teachers	11	3
Mentors reflecting on beliefs about mentoring	19	5
Studies that indicate possible places to begin mentor training	26	7
Studies that took place in a state-sponsored public charter high school	0	0
Studies that took place in any charter school (high or middle)	0	0

Note. Twenty-seven total articles.

Participants and Setting

The majority of the studies (n = 21, 78%) centered on BTs in their first 3 years of teaching. Five studies (19%) focused on student teachers in university preparation programs. The mentees in 24 studies (88%) taught in a high school setting. One study (i.e., Bickmore, D. & Bickmore, 2010) was an exception and depicted research conducted exclusively in a middle school setting. Although this review seeks to understand what research tells us about high school teacher mentoring practices, we felt it was necessary to include because of its secondary setting, its specific focus on mentoring practices, and its challenge of conventional setups of mentoring programs. Only six studies (22%) showed any elements of mentor recruiting. Finally, it is important to note that during the larger database search, no studies were found that focused on mentoring programs in state-sponsored public charter schools or any charter school regardless of setting.

Mentoring Practices and Training

10 studies (37%) made at least one specific mention of mentors being trained for their position. However, only three (11%) of the studies actually specified which skills were covered in training sessions. The program emphases might indicate the types of training, wherein the researched programs in 17 studies (63%) offered instructional tools and strategies and in 18 studies (67%) focused on helping mentors meet personal needs of their mentees.

Research Methods

Of the 27 studies, the majority (n=24; 89%) were qualitative studies derived from a variety of data sources (e.g., observations, interviews). The remaining three studies (11%) employed mixed methods (e.g., surveys, observations, interviews).

Synthesis of Studies

To answer our research question (What does research, published from 2010 to 2020, tell us about the training of teacher-mentors in public charter schools?), deductive and inductive coding revealed (Strauss, 1987) the following emergent themes: mentor services, mentor training, and indications where further research on mentor training is needed.

The first theme, mentor services, applied to 10 studies (37%) that described the variety of services mentors offered to mentees. The second theme, mentor training, was represented by 10 studies (37%) that indicated any specific mention of mentor training prior to induction. The third theme, indications where further research on mentor training is needed, was relevant to seven studies (26%). These studies made no specific mention of mentor training yet indicated suggestions for further mentor training research.

For this review's synthesis, the order in which the themes are discussed is important. The specific order demonstrates the evolution of what the research reveals about the progress of teacher-mentor training research. The bulk of the research on mentoring largely converged on what mentees need for professional success. With that idea established, analysis could begin on how mentors were trained to deliver those specific services.

Mentor Services

About one third of the studies (n = 10, 37%) focused primarily on services that mentors provided to mentees. However, these studies provided minimal detail on how teacher-mentors were prepared. Instead, they strictly explored what mentees received (e.g., support, services) during mentoring partnerships. Knowing the progression of mentoring practices can help inform schools on how they should train their mentors.

Mentor-Mentee Relationships and Collegiality. Pegg et al. (2010) conducted interviews with mentees to study mentoring relationships and characteristics that supported and challenged the relationships; additionally, they found that summer workshops conducted by mentors were helpful to mentees because the workshops focused on delivering instructional skills and increasing familiarity with subject-area content. Mentors conducted peer observations of mentees' classrooms during the school year and debriefed with mentees; however, mentors were hired from outside the school. While the impartiality of an outside observer was a positive characteristic, the setup created a challenge because matching mentees with mentors from the same content area was not always possible; the program's logistics simply made it unfeasible.

Like Pegg et al., (2010), Huisman et al. (2010) also conducted interviews with mentees, but interviews by Huisman et al. concerned reflections on experiences of urban teachers and found it critical for mentees to forge meaningful relationships with experienced colleagues. These relationships provided the highest levels of support with one caveat: a few mentoring interactions were venting sessions rather than discussions fostering instructional growth. While these relationships provided emotional support, they did not increase levels of effective teaching. Many mentees, however, in the study were pleased enough with their experience that they desired to become mentors later in their careers. Additional mentoring benefits included problem-solving practice, maintaining high expectations for students and colleagues during the entire school year and increasing awareness of the sociocultural makeup of the school.

The aforementioned studies (Huisman et al., 2010; Pegg et al., 2010) both examined typical 1:1 mentor-mentee relationships. Bickmore, D. and Bickmore (2010) expanded on this concept by broadening the scope of mentee

interactions with additional faculty members who provided various mentoring services. They helped to design a "multifaceted" mentoring program at two different schools. In addition to having 1:1 mentor-mentee relationships, mentees were members of interdisciplinary teams of teachers and administrators with varying experience. Team members gave advice to mentees on instructional skills and school policies. Bickmore, D. and Bickmore explored the mentees' experience in the program through interviews and questionnaires. Results showed mentees felt positively about their assigned mentors, interdisciplinary team members, and administrators. Results suggested it was easier to meet the needs of mentees when more faculty members collaborated to shoulder the task of supporting their newest colleagues to be effective faculty members.

While the Bickmore, D. and Bickmore (2010) study represented a dramatic shift from traditional approaches to research on mentoring, Hallam et al. (2012) similarly added to the shift by focusing on perceptions and beliefs about mentoring from the mentee perspective. Hallam et al. analyzed two different mentoring models, interviewed teachers about their mentoring beliefs, and examined teacher retention data. Both models relied on collaboration through Professional Learning Communities (PLCs), which were reminiscent but not identical to Bickmore, D. and Bickmore's study. Notably, one district included impartial district teaching coaches, defined as non-administrative instructional leaders who offer nonevaluative constructive feedback, whereas the other district did not use coaches (Hallam et al., 2012). In both models, mentees reported fostering a trusting relationship with their mentor was the most important characteristic of mentoring for them. Mentees also felt very strongly about PLC support (Hallam et al., 2012). In cases where district coaches were found to be ineffective, mentees reported principals provided helpful amounts of support. As the study progressed, mentees gravitated more to their in-school mentors rather than their district coaches, likely due to proximity and regular daily interactions. However, the school using district coaches had a significantly higher retention rate (64%) than the school that did not (42%).

Studies on the effects of climate collegiality within schools continued to take place elsewhere. Pogodzinski et al. (2013) conducted surveys on mentees' perceptions of collegial climates at schools. They found mentees defined a collegial climate as one that matched their professional needs, fostered trust between colleagues, and contained a sense of shared responsibility for execution of instructional duties across the faculty. The surveys also addressed the likelihood of BT retention, and the results showed that despite perceived positive elements, mentees who reported experiencing such climates did not exhibit a greater intent to return to their schools than peers who lacked collegial climate experiences. Thus, climate alone did not increase retention. Pogodzinski et

al. suggested formal mentoring may address shortfalls in retention due to tailored mentee support. Pogodzinski et al. also suggested mentors be closely aligned in content and grade level with their mentees to derive the most beneficial outcomes for retention.

Formally Mandated Mentor-Mentee Interactions. Roff (2012) examined teacher perceptions of mentoring programs through interviews with participants and document analysis of induction resources. Most participants felt their mentoring program was helpful because of the perceived safety net mentors provided to mentees. Overall, mentors and mentees felt highly positive about their mentoring program but did not articulate other reasons for those feelings.

Research on professional qualifications common to effective mentors began to emerge shortly after Roff's (2012) study. Wasburn et al. (2012) identified 100 National Board Certified Teachers (NBCT) who served as mentors to special education teachers and surveyed them about services offered to mentees. Services included the following: observations, varied feedback, sharing of classroom management techniques, curriculum implementation strategies, and emotional support. Wasburn et al. found services were offered in nearly equal amounts and approaches did not change during formal mentoring settings (i.e., mandated meetings) and informal mentoring settings (i.e., organic conversations). When not formally mandated, classroom observations dropped in frequency; therefore. Wasburn et al. advocated for more research on the necessity of implementing additional formal mentoring structures in schools and for more training for schools that often relied on informal mentoring.

Mandated mentoring interactions may still have some efficacy. Unlike earlier research by Bickmore, D. and Bickmore (2010) that analyzed interdisciplinary teams, Bickmore (2013) explored this concept in a study focusing on collaboration and shared mentoring within the same content area. In a 2013 study, Bickmore examined how small groups of experienced English teachers mentored groups of beginning English teachers. A series of summer professional development (PD) sessions were followed by sessions throughout the academic year. Reflective writing served as the basis for discussions on a variety of topics. including perceptions of mentoring and content area instruction. Mentees felt overwhelmingly positive about their experiences and expressed high growth in confidence as educators; they also indicated a greater understanding of what mentors provide for mentees. Bickmore (2013) demonstrated this setup could be replicated in other districts, but it would likely require extensive funding and coordinating administrators.

School Climate and the Needs of New Educators. Since collegial climates were shown to have positive effects on mentees, more research was conducted on how student-

teaching candidates could have an even larger collegial climate at their disposal before starting their first three years as full-time instructors. For example, Fox and Wilson (2015) analyzed different ways student teachers could build a network of professionals outside their own buildings. Their perceptions of collegiality were affected by student teachers' willingness to network proactively. Student teachers' willingness to talk to more-experienced colleagues directly influenced their access to support and their subsequent development as instructors. Student teachers who exhibited more reflection during these discussions felt more confident about their abilities as fulltime teachers. Therefore, it became clear mentors alone did not necessarily affect the growth of student teachers. Mentees could reflect and seek out some resources independently beyond passively receiving services from mentors.

Since teachers' daily technology use has become more prevalent, Alemdag and Erdem (2017) studied how technology skills might affect the ability to network. A group of mentees were each assigned an electronic mentor (e-mentor). E-mentors gave presentations on instructional strategies and conducted live video conferences for mentees. Alemdag and Erdem found e-mentors put significant thought into messaging and delivery of strategies because of the e-setting. This finding was interesting for two reasons. First, mentees gained trust in the e-mentoring sessions; they reserved their questions about minor challenges for colleagues in their own buildings. Mentoring sessions could then focus on instructional strategies and content-area development. Second, mentees felt significantly less needy toward their e-mentors by the end of the school year. In other words, by undergoing the e-mentoring sessions, mentees developed increased confidence to handle the pressures of being a teacher by the end of their first year. Alemdag and Erdem indicated more research would need to be conducted on whether the e-setting directly impacted these results. However, it appeared mentees benefited greatly from having highly tailored support from experienced mentors, whether in person or online.

Mentor Training

The second theme from the review pertains to the studies (n = 10, 37%) that evaluated the training (or lack of training) for the mentors. The amounts of mentor training varied widely, and interestingly, none of the studies focused exclusively on how to train mentors. Therefore, it is necessary to examine what elements of mentor training were present in order to determine how mentors are prepared to meet the needs of mentees.

Ideals Versus Practical Applications of Mentoring Skills. Hennissen et al. (2010) conducted two separate studies on using stimulated recall to prepare mentors' supervisory skills. In the first study, Hennissen et al. (2010)

found mentors' interactions usually fit into four categories: "discussed topic," "use of supervisory skills," "mentor teacher's role," and "strategy during the dialogue" (p. 211). In their second study, the authors (Hennissen et al., 2011) focused on 30 teacher-mentors who underwent training in the aforementioned categories to help foster reflection in their mentees. Findings showed mentors who engaged in training "entered a new domain of expertise adding to their expertise as a teacher of pupils" (p. 213). Findings also showed while these mentors would likely have improved with experience, mentors felt the training accelerated their growth in that role.

While Hennissen et al. (2010) studied psychological processes within mentors, other studies researched programs where mentors were prepared to offer practical training to their mentees. For example, Rikard and Banville (2010) followed twenty 1st-year physical education teachers for 2 years and wanted to ascertain whether mentees felt they were well-served by their trained mentors. All mentors in this program underwent training

by lead mentors who taught a course, "Mentoring Novice Teachers," where, according to the course description, mentors learned to use observational strategies; model effective teaching practices and class management; problem solve; and provide specific, useful feedback for improving novice teachers' performance. (p. 249)

Rikard and Banville (2010) acknowledged the results were both "surprising and troubling" (p. 257), as only nine mentees felt they were properly supported by mentors; the other 11 teachers reported not feeling enough support. Therefore, findings suggest training mentors to deliver practical skills to mentees may not meet all the mentees' needs. The ineffective mentors did not provide opportunities for reflection, unlike the mentors studied by Hennissen et al. (2010). Incidentally, the program evaluated in Rikard and Branville's (2010) study did not teach mentors how to develop reflection in mentees.

Mentor Services Not Covered in Trainings. With an emerging trend of mentee reflection becoming a critical component of successful mentor training programs, Barrera et al. (2010) interviewed teacher-mentors to gain more insight on critical needs of mentor training. Most of the mentors interviewed desired program coordinators who could articulate purposes and objectives. Mentors also felt sessions should include strategies on how to help mentees "serve students in special populations" (p. 71). Mentors preferred to be viewed as supportive rather than evaluative. Based on this study, it is possible that mentors need explicit direction on how to work with mentees instead of simply being told what services need to be offered. These results are consistent with Hennissen et al. (2010), who studied a successful program that included training on mentor-mentee communication.

As mentors articulated their own needs for training,

Hennissen et al. (2011) conducted a study to see if mentors were actually delivering the skills from their training or if they were deviating from the concepts. Hennissen et al. implemented the same training program from a previous year's study that emphasized reflection within mentees. Findings showed mentors delivered the components of their training along with extra services not covered by training. These additional services fell within the categories of "emotional support and task assistance" (p. 1056). However, it is unclear if mentors were successful due to the delivery of training-specific skills or if it was due to the delivery of extra services not covered by training.

Prior to studies conducted in 2011, programs which focused on skills related to mental processes within mentors and mentees were arguably successful. Shernoff et al. (2011) disagreed with the premise that focusing on mental processes led to successful mentor-mentee relationships. Shernoff et al. studied a program where mentors specifically provided "intensive support in evidence-based practices for classroom management and engaging learners" (p. 465) as well as opportunities for mentees to "connect ... with their larger network of colleagues" (p. 465). The services covered in Shernoff et al.'s study for mentor training more closely resembled those of the program in Rikard and Banville's (2010) study. Mentors were selected based on "peer-nominated ability to provide direct advice on classroom management and motivating students" (Shernoff et al., 2011, p. 472). Findings showed more than 90% of interactions reflected one-way instruction from mentors to mentees, but high numbers of participants also expressed satisfaction with the mentor program. These results could be skewed because some satisfaction could be due to a simultaneously occurring PLC model containing supportive colleagues who offered similar services outside of official mentoring contexts. Regardless, the program in this study found great traction by focusing more on practical skills and less on mentor-mentee communication.

Gilles et al. (2013) found results that fit more with the emergent trends in our review. They interviewed a variety of mentees during stressful times of the school year to gauge feelings about services offered by mentors. Mentees reported that successful mentors offered "emotional support, pedagogical support, planning/collaboration, the gifts of time, and advice" (p. 84). Three of these five themes relate to the concept of mentor-mentee communication while the other two relate more to practical skills. Therefore, mentees in this program may have felt that they received the best support when their mentors offered services that included communications support.

Negotiating External Sources of Mentor Training. Other induction studies explicitly mentioned mentor training but with limited detail. The results of these studies were mixed. For example, Helfeldt et al. (2015) studied an induction program that employed mentees as interns in

their 1st year of teaching, to ease the transition of mentees into the profession. Interns were treated essentially as full-time teachers but with reduced class loads. These interns received "intensive and extensive mentoring support and induction support provided by trained, full-time mentors" (p. 5). Interns spent between 4 and 5 years in the program. After the first cohort finished the program, 96% opted to return to their schools. Subsequent cohort groups attained similar rates of retention. Helfeldt et al. suggested "the intensive mentoring provided by trained, full-time mentors, along with other induction procedures incorporated into the internship program, may be contributing to the findings of high retention rates among the interns" (p. 12).

Similarly, Kuzle and Biehler (2015) found the university setting played a pivotal role in mentor training. First, mentors were trained for statistics classes and were given extra content area knowledge support by university personnel. Next, mentors learned how to design effective PD for mentees. Both phases took place during the early stages of the school year. Then, later in the year, mentors developed a PD session under the guidance of Kuzle and Biehler (2015). To account for bias, the researchers stated, "We gave them a lot of freedom in designing their own PD course, because we respected their professional role, interests, competences, and preferences" (p. 42). Concluding, Kuzle and Biehler (2015) found "when designing and implementing their PD, the mentors focused more on the structural elements than on the quality PD practices across activities and different blocks of the PD" (p. 49). In other words, the theoretical concepts seemed to get either lost or minimized when the mentors created their sessions. These results are similar to previous studies (e.g., Huisman et al. 2010; Pegg et al., 2010) in this review where mentors and mentees felt immediate practical, professional needs were a higher priority for them.

In 2018, Luet et al. approached the topic from a different theoretical perspective. Luet et al. focused on a program that trained mentors to develop a deeper understanding of their school's community before being assigned mentees. Prospective mentors were selected based on a range of criteria from the school district's evaluation instrument, and they were asked a series of questions regarding their perceptions of the school community. A local university offered training in how to move from deficit-based thinking to asset-based thinking. Luet et al. found their "interventions-including the creation of a Community Resource Guide and structured interaction with community members—were largely ineffective, and mentors continued to discuss their students and the local community in terms of perceived deficits" (p. 184). Their results reflected a need for schools to examine how they recruit mentors.

Additionally, Willis et al. (2019) also focused on the in-school community. They argued mentors act as "unacknowledged middle leaders" (p. 1). Willis et al.

conducted a series of interviews with mentors on how they perceived their roles and trained the mentors on a dialogic approach to mentoring as opposed to the more authoritative approach the mentors had been using prior to the study. Navigating between these modes yielded results where mentors felt they had more productive working relationships with their mentees. However, mentees were unsure how to view their mentors' level of authority. Willis et al. suggested studies like theirs "can provide insights into the role of mentors as middle leaders, how it might be valued and evaluated, as well as how local practices can influence the way that changes are enacted" (p. 347).

Indications Where Further Research on Mentor Training Is Needed

The third theme included seven studies (26%) which indicated suggestions for mentor training but did not make specific mention of explicit mentor training unlike the previously discussed articles.

Shortly after their study on a multifaceted induction program, Bickmore, S. and Bickmore (2010) explored the principal's role in the induction of new teachers. They interviewed several mentees about perceptions of their school's induction program. Most responses related specifically to interactions with school administrators. Bickmore, S. and Bickmore found "the school principals met specific personal needs for each teacher" (p. 457). When combined with earlier studies about mentors filling the same need, it is possible that meeting personal needs of mentees occurs at multiple levels of a school's hierarchy. In short, induction programs led by principals who focus on "building a healthy school culture and climate through schoolwide structures and procedures" (p. 463) seem to be more successful.

The remainder of the studies (n = 6) in this section, however, placed the focus on the mentor's viewpoint. Foor and Cano (2012) conducted a study aligning with Wang et al.'s (2008) suggestion for schools to focus on teachers' beliefs before assigning them mentees. Foor and Cano used surveys to measure mentoring abilities and beliefs of cooperating teachers who were serving as part of a university-sponsored student-teaching program. Cooperating teachers felt they could help their novice teachers demonstrate a variety of skills including exhibiting professionalism, meeting student academic needs, assessing students, designing coherent instruction, and managing classroom procedures. Foor and Cano concluded that when trying to recruit mentors to induction programs, administrators should strongly consider the beliefs of their prospective teacher-mentors before accepting them into the program. This represented a shift from the philosophy of programs being designed according to the beliefs of the coordinating administrator.

Additionally, LoCasale-Crouch et al. (2012) studied a program for 77 mentees and 11 experienced teachermentors that offered "individual mentoring and other structured professional learning opportunities organized and led by the mentors" (p. 307). LoCasale-Crouch et al. interviewed all mentees and found high retention at the end of the program. Many mentees credited positive collaboration with their mentors as a reason to return for the following year. However, LoCasale-Crouch et al. also stated, "It is critical not to jump to the conclusion that merely increasing time spent in [sic] with a mentor during induction will directly translate to improved novice outcomes" (p. 315). In other words, a deliberate plan in giving mentors specific directives about how to interact with their mentees is needed. Although effective mentors have been able to succeed in the past without specific directives, more research could be needed on how mentees perceive mentors who are trained in a deliberate manner.

Notably, a focus on the mentor viewpoint was present in a low amount (n = 8, 30%) of the final corpus. Four studies in particular communicated important findings about the mentor perspective, van Ginkel et al. (2016) studied the ability of mentors to adapt to their mentees (as opposed to mentees conforming to mentor demands in more traditional programs). van Ginkel and colleagues conducted interviews with 18 teacher-mentors and scored them based on interactions with mentees in four different types of activities: "(1) providing emotional and psychosocial support for learning, (2) supporting construction of personal practical knowledge of teaching, (3) creating a favourable context for novice teacher learning, and (4) changing novice teacher behaviour" (p. 206). van Ginkel et al. found that teachers who try to meet mentees on an emotional level had greater success at fostering growth in their mentees. On the contrary, mentors who focused strictly on cognitive approaches to teaching did not have corresponding levels of success.

Wong (2018) found similar results by applying a social capital lens to induction research during interviews of 31 mentors who described what they learned from mentees. The most successful mentors were cognizant of the diversity of needs across multiple mentees. In turn, the mentors tailored their mentoring practices to specific needs of mentees. These mentors also reflected on their self-perceived limitations in their efficacy. Some mentors felt they struggled to impart technical knowledge only onto mentees with different characters and personality. Therefore, mentors who can reflect on mentee needs are still able to meet at least some of those needs even when personalities are not perfectly compatible.

Mukeredzi and Manwa (2019) also found similar results on the gains from strong mentor-mentee communication. The specific need for the mentees in their study arose from their status as colleagues. Mukeredzi and Manwa reiterated the importance of how mentees "appreciate being respected, accepted, regarded as colleagues, and made to feel welcome in the school. They often yearn to be accepted as a person, a teacher, and a part of the teaching profession" (p. 40). Therefore, these results suggested part of developing mentor communication skills might focus specifically on building a mentee's feelings of acceptance.

Bolstering these skills in mentors may not be an easy task, though, because mentors often enter the role with preconceptions shaped by their own experiences as mentees. Lunsmann et al. (2019) surveyed four mentors about their own experiences as mentees. During these interviews, they asked mentors about their beliefs on mentoring and about how to perform their role in a way that would foster growth in their respective mentees. Then, Lunsmann et al. observed the mentors to see if their mentoring practices matched their beliefs from the interviews. Findings showed all four mentors mirrored as mentees at the start of their careers. Expressing beliefs and preconceptions that differed from their own experience did not have any effect. Mentors continued to mentor in the same way they received services as mentees. Therefore, it is possible that convincing a mentor to implement specific mentoring practices may be difficult if their own mentor had enacted similar practices for them when they were mentees earlier in their careers.

Discussion

In reviewing the 27 inclusionary studies, three main emergent themes help us to understand *what* research is telling about the training of teacher-mentors. The themes—mentor services, mentor training, and indications where further research on mentor training is needed—provide a foundation for understanding the current research trends on the training of teacher-mentors. Findings within these themes also help determine which of Wang et al.'s (2008) four suggestions for future mentor training research are being satisfied.

Mentor Services

First, 10 of the studies (37%) focused on services (e.g., classroom management strategies, assessment, lesson planning) mentors provided to mentees. Research from this theme presented a clear trend of mentees wanting emotional support and instructional strategies from mentors (Huisman et al. 2010; Pegg et. al, 2010).

Furthermore, findings within the theme of mentor services illustrate significance pertaining to collegiality. Mentees who were given support in a collegial environment were more likely to feel a sense of belonging among the faculty (Bickmore, 2013; Fox & Wilson, 2015; Pogodzinski et al., 2013). The physical composition of the mentor-mentee relationship had no noticeable effect on how positive the experience was for the mentee. Findings indicate a positive 1:1 mentor-mentee relationship may not be necessary for

giving adequate support to mentees. Instead, the nature of the interactions matters more for increasing mentee retention.

In addition to a collegial environment, a set of formal mentoring structures increased the chances of making mentees feel more like members of a professional community (Fox & Wilson, 2015). Mentors who appeared to have some training on formal mentoring structures had a positive effect on mentees (Fox & Wilson, 2015). Mentees benefited from a *combination* of a collegial environment with purposeful planning within the mentoring program.

All of the studies in this theme satisfied Wang et al.'s (2008) recommendation of researching various ways to meet BT needs. Unfortunately, the studies provided limited details on how/if mentors were specifically trained for their role. Additionally, for this review's research question, any mentions of explicit mentor training in these studies were either absent or tangentially mentioned and did not provide enough insight on mentor training.

Mentor Training

The second theme included 10 studies (37%) that evaluated training or displayed a lack of training for mentors. These studies examined who gave specific training to mentors and the types of training delivered. Interestingly, none of the studies in this section were devoted specifically to mentor training. They merely contained elements of apparent mentor training that we used to determine how mentors were being prepared for their roles.

Mentors who were provided with training in communication skills had positive interactions with their mentees (Gilles et al., 2013; Shernoff et al., 2011). While this type of training made mentors feel more secure in their role, the training did not necessarily lead to positive professional experiences for mentees (Kuzle & Biehler, 2015; Rikard & Banville, 2010). Finally, mentor programs that received support from university faculty were successful only if the mentors were given training in communication skills for coaching mentees (Helfeldt et al., 2015; Luet et al., 2018).

All of the studies in this theme demonstrate a further need to research what preservice preparation would be useful for mentees (Wang et al., 2008). None of the studies satisfied Wang et al.'s suggestion about structuring induction programs around national teaching standards. The studies also did not satisfy Wang et al.'s suggestion about studying BT perceptions about teaching when mentors delivered support to mentees.

Indications Where Further Research on Mentor Training Is Needed

Seven studies (26%) implied where mentor training was needed but did not specify elements of training. These studies showed that mentors had positive views about the craft of mentoring (Foor & Cano, 2012; van Ginkel et al.,

2016) and came into their roles believing in the benefits mentoring provided (Foor & Cano, 2012; van Ginkel et al., 2016). Additionally, emotional connections between mentors and mentees produced more benefits for mentees than simply working in close proximity to their mentors (van Ginkel et al., 2016; Wong, 2018). In other words, time spent with a mentor was not a reliable indicator of professional growth (van Ginkel et al., 2016; Wong, 2018). The nature of the interaction mattered more. Finally, some mentors came into their roles with specific views about mentoring but did not execute their duties in a manner consistent with their beliefs (Lunsmann et al., 2019). Therefore, some mentors may benefit from additional self-reflection about their practice as mentors.

The studies in this theme demonstrated a variation of Wang et al.'s (2008) suggestion about studying BT perceptions of teaching. These studies demonstrated a need to study *mentor* perceptions of mentoring. Both scenarios appear to support Wang et al.'s conclusion that initial beliefs and practices can shape, impede, or facilitate what participants gain from training sessions.

Limitations

This systematic review was meant to serve as a justification for future research on mentor training for high school teachers. The final number of 27 studies was found from an original search of 540 articles. Interestingly, very few articles addressed the focus in our research question. The majority (n = 17, 63%) of the studies did not make any explicit mention of mentor training. Even within the 10 studies that did make explicit mention of mentor training, hardly any (n = 2, 7%; i.e., van Ginkel et al., 2016; Wong,2018) made mentor training the primary focus of the study. Notably, none of the 27 studies focused on mentoring programs in charter schools, including state-sponsored public charters. Researchers may find it questionable to include studies that do/did not focus on mentor training in a literature review devoted to it. We argue that it was imperative to include these studies for two reasons. The first reason is that the training of mentors depends on having a knowledge of what mentors need to do for mentees. The second reason is this review provides a microcosm of the current state of research on mentor training. Given the significant difficulty in finding studies focusing primarily on mentor training, more research is needed on how mentors are trained in any high school, not just state-sponsored public charters. Therefore, any future research on mentor training will have to be developed from what has already been done, even if that body of research seems tangential.

Another limitation present in our review was our search terms. Search terms were selected and combined using boolean operators because we felt they were the most relevant search terms to our research question. Researchers exploring the same research question may deem other terms (e.g., induction) were necessary. We believe there are certain terms related to the ideas of mentoring that are not actual mentoring. The term "induction" is one such example. Induction programs can possibly include support from mentors, but they also include sessions with administrators, feedback sessions with department chairs, and common planning time with other department members (Ingersoll, 2012). These services may include elements of mentoring; however, they are not interchangeable with actual mentoring where mentees receive systematic, continuous support from an experienced teacher. Including search terms related tangentially at best to mentoring would have broadened the scope of the review and yielded more ambiguous results pertaining to our research question.

Implications

This systematic review sought to provide guidance about the development of future studies on training for teachermentors in a high school setting. Even as professional needs continue to be met in mentoring programs, teacher retention continues to be problematic (Ingersoll & Smith, 2003; Neason, 2014). Therefore, we focused on two of the recommendations made by Wang et al. (2008) yet to be met adequately by the field. Their call for training mentors on the beliefs and perceptions on mentoring has gone largely unheeded. Many mentors enter the role without reflecting upon the role of mentoring and how it should function in their school. Mentors also have not been presented with the beliefs and perceptions about mentoring from the mentees' perspectives. Some mentors are taking on-or being assigned-a critical duty in the school without possessing a strong base for understanding why they do what they do.

Moving Towards a Culture of Mentoring

Overall, our review yields a trend of mentees receiving high levels of support with regards to daily instructional skills, support which enables them to survive the difficult first years of their career. Unfortunately, it is highly concerning that mentees still leave the profession despite recognizing the support they have received. Perhaps the approach of giving mentees day-to-day skills in their mentoring programs may not be the best way to retain them and nurture their professional growth. Instead, it may be critical for mentors to help mentees reflect on day-to-day instructional performance amid the backdrop of larger phenomena within teaching—the process of learning, the process of feedback, and the process of purposeful planning.

Getting mentees to buy into the idea that their learning curve will take years can be a difficult sell, though (Inman & Marlow, 2004). Additionally, how can mentees be expected to grow as teachers if they do not understand the larger goals/objectives to which they should be aspiring?



Most mentoring programs focus on either personal needs or professional needs, but rarely do programs meet all of those needs simultaneously.

That gap in understanding is where mentors must fill a critical need. Even experienced mentors who have built successful careers need to be shown how to communicate large-scale goals/objectives to mentees entering the profession during a time that could be markedly different from when the mentors began teaching.

Conclusion

When taking these findings in conjunction with the recommendations for further research by Wang et al. (2008), the research provides researchers and educators with ideas and practices that have been applied; nevertheless, the research also demonstrates a gap that needs to be addressed. Research involving teacher mentoring has done a thorough job of illuminating the variety of needs mentees have. Most mentoring programs focus on either personal needs or professional needs, but rarely do programs meet all of those needs simultaneously.

Sacrificing professional needs or personal needs is not the mentors' fault. Most mentors sign up for the role because they feel the work is necessary for the wellbeing of a faculty (van Ginkel et al., 2016). Therefore, collaboration is necessary between administrators and faculty members in creating mentoring programs painstakingly defined in their various goals, aims, and procedures. Before any mentoring occurs, a mentoring program should first involve deep reflection on how mentors perceive their role (Wang et al., 2008). Then, mentors need to understand how prospective mentees feel about such a program. If mentors can forge meaningful connections (van Ginkel et al., 2016) with mentees on the personal side of the job, then the mentee's trust will be there when it comes time to have discussions about improving professional performance.

After the initial reflections about perceptions and beliefs, discussions should begin to dictate the process of how mentors are going to fulfill the needs of their mentees. What the program structure should look like requires research and testing. What is clear from this review, though, is that mentoring programs need to have an overall objective of serving both personal and professional needs of mentees. Accomplishing this objective requires training mentors to offer services in both areas. The role is much more than having daily chats with mentees or developing afterschool workshops to add to mentees' instructional toolboxes.

Teacher-mentoring requires experienced, highly invested, patient, trained teachers who are experts of both craft and communication. Mentoring programs also require supportive administrators who understand how to reach both students and adults in meaningful ways that have lasting impact. Lest we forget, mentoring programs also require mentees who possess enough wherewithal to understand their mentors were once mentees too.

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