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Multidimensional and Burgeoning Leadership: Literacy and Multilingualism

Emily Howell [1,*], Hazel Vega [1], Lindsey W. Rowe [1], Katie M. Crook [1], C. C. Bates [1], Kavita Mittapalli [2] and Amlan Banerjee [2]

[1] Education and Human Development, Clemson University, Clemson, SC 29634, USA; hvegaqu@clemson.edu (H.V.); lrowe2@clemson.edu (L.W.R.); crook4@clemson.edu (K.M.C.); celestb@clemson.edu (C.C.B.)
[2] MN Associates, Inc., Fairfax, VA 22030, USA; kavita@mnassociatesinc.com (K.M.); amlan@mnassociatesinc.com (A.B.)
* Correspondence: esmothe@clemson.edu

Abstract

This design-based research study worked with 25 teachers with specialized early literacy training. Researchers investigated the impact of professional development advancing their multilingual learner (ML), literacy, and leadership capacity, addressing gaps in the research merging the fields of literacy, multilingual instruction, and leadership. Spanning two years of both qualitative and quantitative data collection and analysis including teacher, student, and district surveys, teacher logs, research logs, and teacher interviews, the researchers capture the iterative nature of the needs of teacher professional development to serve MLs. The researchers describe the needs of teachers for professional development, the micro modifications made to adapt to these needs, and the resulting significant growth in teacher self-efficacy and knowledge of literacy practices for MLs. Implications are given regarding pedagogy and future research with specific macro modifications outlined for future iterations. The research builds upon frameworks and research for literacy and multilingual instruction as well as teacher leadership.

Keywords: multilingual learner; professional development; teacher leadership; design-based research

1. Multidimensional and Burgeoning Leadership: Literacy and Multilingualism

There are two key points of tension in effectively serving multilingual learner (ML) education in the United States. While this is the fastest-growing population in the United States (NEA, 2020), teachers are often not qualified to leverage their specific linguistic and cultural assets in instruction, creating not only a shortage of teachers but also a vacuum of leadership and expertise among those qualified to train others to fill this gap (E. Howell et al., 2025; Pennington et al., 2024). Compounding this problem of a growing student population met with a shortage of teachers is the political context of the current administration curtailing support for teaching these students, such as incapacitating the Office of English Language Acquisition, rescinding published guidance for teaching MLs, and slating to eliminate Title III funds in 2026, threatening a civil rights issue of unequal access to education (AERA, 2025; Belsha, 2025; Najarro, 2025). Thus, it is a pertinent time to consider how to increase instructional capacity for MLs and teacher leaders of this instruction who can continue to facilitate this growth for their districts' future.

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For early learners, literacy development is especially important as students must meet both challenges of language development and content learning and learn the fundamentals of literacy according to developmental stages appropriate for their expanding linguistic repertoire (Lee & Maerten-Rivera, 2012; Santau et al., 2010; Uribe, 2019). However, there is a gap in the research merging ML instruction and early literacy leadership in both trending Science of Reading and previous literacy intervention efforts (Dunham et al., 2024; Rowe et al., 2026; Sharratt & Wynn, 2018). In this study, we address this gap by focusing on a group of interventionists and teachers (using both titles throughout) with at least six graduate credit hours of specialized early literacy training, thus giving them the potential to be change agents in their districts (Bussell, 2001; Sirinides et al., 2018). However, these teachers, like many across the nation, desired more development in ML instruction. We examine a professional development (PD) intervention for the first of two cohorts of potential literacy leaders, due to their specialized training, and examine its impact on ML instructional capacity through a design-based research (DBR) study. We address the research question: how did the DBR intervention prepare early literacy teachers and leaders for ML instruction? We use theories germane to literacy and ML instruction combined with the needed lens of teacher leadership to understand teachers' background and growth, developing ML expertise, and burgeoning though hesitant leadership, concluding with implications for both practice and research.

2. Theoretical Perspectives

This study is grounded in perspectives important to both a developing ML and leadership teacher identity.

2.1. Mainstream to ML Instructional Practice

With the rising ML population across the United States and internationally, all teachers are increasingly asked to be ML instructors (M. R. Coady et al., 2016). We draw from M. R. Coady et al.'s (2016) framework that includes three central components to instructional practice for MLs: (a) teacher knowledge of teaching and learning of MLs, (b) teacher education, background and experiences, and (c) teacher knowledge of MLs. While this framework originally used the term English Language Learners (ELLs) to refer to students learning English as a second language in school, this study uses MLs to reflect a more contemporary asset-based theorization. We adapted the framework, replacing ELLs with MLs, thus acknowledging students' full linguistic repertoires rather than focusing on their English proficiency. However, we retained M. R. Coady et al.'s (2016) core constructs as the three dimensions are relevant to our context. Applied to our research, this framework highlights the need for teachers to develop specialized knowledge to identify, draw on, and expand multilingual and cultural resources to support both language and content learning. This theory divides teacher knowledge of teaching and learning of MLs into three subcomponents: teachers understand how language works, MLs learn language and use it as a vehicle for learning, and teachers understand how to differentiate instructional practices to build on MLs' linguistic practices and lived experiences. The framework argues teachers receiving specific training for MLs can make more informed pedagogical and advocacy decisions for their MLs and that this preparation would ideally include working directly with MLs. Finally, teacher knowledge of MLs includes their knowledge of these learners, including their linguistic, literacy, and cultural backgrounds. This framework acknowledges the importance of specialized ML teacher training, but how well teachers are receiving such training deserves more exploration. The tenets of this theoretical perspective guided our analysis of the impact of PD targeting ML instruction on literacy teachers with advanced literacy training, honing their potential to lead such PD in the future. To this end,

our study contributes to these theoretical underpinnings by describing potential leadership capabilities and qualities of future teachers addressing ML instructional needs.

2.2. ML Instruction and Teacher Leadership

Lieberman and Friedrich (2010) discuss elements of teacher leadership, such as identity, community, productive conflict, and practice, and that teacher leaders are needed because of their intimate knowledge of students, the curriculum, and instructional practices. We focus here on their component of identity in teacher leadership. This identity component is critical as many teachers are skeptical of calling themselves leaders due to hierarchical ideas of leadership. Teachers often fear other teachers will disavow them from communities of practice should they share their practices with other colleagues. Teachers may need opportunities to continuously improvise leadership through interaction with others. These researchers give three components to consider in developing teacher leaders: (a) their identity as a leader is in constant flux; (b) this identity is social; and (c) teacher leaders need room to develop their leadership.

This leadership identity and its development is important as it not only helps their students but other educators, and this identity is often multidimensional. Leaders may identify with more than one community: for instance, in the present study, as teachers, as leaders, as teachers of literacy, and as teachers of MLs. Increasingly, calls for leadership in schools have (a) requested more decentralization, so teachers can be more responsive to the needs of their students, and (b) developed teacher leadership and other types of "middle leadership," those assuming leadership roles between teachers and principals (Li et al., 2021, p. 226). This decentralized leadership has potential to impact teachers adopting new pedagogies. Spheres of teacher leadership can be individualistic or communal, formal or informal. Fairman and Mackenzie (2015, p. 63) identify nine of these spheres:

> Individual teacher engages in learning about his or her own practice; individual teacher experiments and reflects, teacher shares ideas and learning; mentors, coaches other teachers; teachers collaborate and work together on collective work; teachers interact in groups and through relationships to re-culture the school; teachers question, advocate, build support and organizational capacity; teachers engage in collective school-wide improvement, focus resources, and distribute leadership; teachers collaborate with the broader school community, parents; teacher (or group) shares work outside of school/in professional organizations.

These roles of leadership are negotiated socially and not only change the person becoming the leader but may impact the leadership role itself.

In the present study, we use M. R. Coady et al.'s (2016) tenets to describe teachers' development of specialized expertise to serve MLs and Lieberman and Friedrich's (2010) perspective to examine how that expertise is involved or triggered by teacher leadership identity. By bringing these two theories together, we seek to explore how teachers' expansion of their capacity for literacy and ML instruction developed and was reconciled over the course of their PD as their leadership skills emerged. ML teachers experienced professional dissonance, recognizing their existing pedagogical knowledge was not enough for their ML instruction (Von Esch, 2021). This growing professional dissonance disrupted their previous knowledge about MLs and was done socially. Such work done with MLs in classrooms suggests PD that was job-embedded was helpful in creating teacher leaders specific to ML instruction. Thus, these two perspectives offer insight into the building of teacher capacity for ML instruction and their potential to lead in that instruction.

3. Literature Review

As the teachers in this study were teachers and interventionists (those who provide supplemental, targeted instruction) with specialized literacy background who wanted to gain more PD to improve their ML instruction and potential leadership, we structure our review of the literature into three components: (a) teacher background and literacy expertise, (b) essential elements of the intervention, and (c) leadership with MLs.

3.1. Teacher Background and Literacy Expertise

The teachers participating in this study had six graduate hours of advanced literacy training and some were in positions of literacy interventionists while others were classroom teachers. The teachers' prior graduate training was in Reading Recovery®, which has shown impact on student outcomes (U.S. DoE, 2013). Reading interventions and assessments are needed early for MLs though they are often neglected as teachers wait for these learners to reach proficiency in English (Dussling, 2018). MLs need similar instruction to that of their peers in the early grades with a specific focus on phonemic awareness, phonics, fluency, comprehension, and writing instruction (August, 2018). Reading Recovery was developed as a short-term early intervention for first-grade students having difficulty learning to read and write (Clay, 2001) and was shown in What Works Clearinghouse to have positive effects in these areas of early reading (U.S. DoE, 2013).

Recently, the Science of Reading (SoR) movement requires an explicit, systematic focus on phonics in contrast to embedding phonics in instruction in writing and teaching this component in more multifaceted or differentiated manners (Aukerman & Schuldt, 2021; Gabriel & López, 2024; Graham, 2020). The SoR has been implemented nationwide, including in the state in which this study took place, and involves the implementation of Language Essentials for Teaching Reading and Spelling (LETRS) training. LETRS training may be problematic in its limitation of addressing MLs and its tendency to adopt a deficit-oriented perspective, missing opportunities to address students' cultural capital and oral language development needs (Goldenberg, 2020; Rowe et al., 2026). Thus, there is a gap in the research merging both efforts focused on MLs and literacy instruction, missing the complications that arise as students are simultaneously learning a language for speaking and understanding as they are learning to read, such as the need to focus on oral language development (Goldenberg, 2020; Rowe et al., 2026; Sharratt & Wynn, 2018). In fact, in the reading wars, MLs have often been marginalized; the treatment of MLs has been described as not even reaching a "side skirmish" (Goldenberg, 2020, p. 5132). High-quality instruction is essential as teachers who are not specifically trained to support MLs often view them from a deficit perspective (Vogt, 2020). Research shows teachers with explicit literacy training have the potential to serve as change agents in sharing their learning with other teachers and stakeholders in their respective districts but may need specific training on how to reach MLs with specific literacy recommendations (Bussell, 2001; E. Howell et al., 2025; Sirinides et al., 2018).

3.2. Essential Elements of the Intervention

There were three essential elements defining the intervention of this design-based research (DBR) study. In DBR, essential elements are those factors that define the intervention, without which the intervention would lose its meaning and are important to highlight as much is in flux due to the iterative nature of such studies (E. Howell et al., 2017; Philippakos et al., 2021). The first two essential elements were that teachers would be provided evidenced-based ML literacy practices in their PD and teacher and student self-efficacy would be a gauge of these practices.

Teacher PD is especially important for teachers of MLs. PD is needed for teachers to respect MLs' funds of knowledge or resources they bring to the classroom (González et al., 2005), preventing a deficit view of these learners that has lent to their overrepresentation in special education classrooms (Vogt, 2020). Education reforms regarding MLs have had successes and challenges over recent decades, including increased services for MLs and PD of teachers; however, more needs to be done to address the "education debt" in the literacy achievement of MLs (Ladson-Billings, 2006, p. 3).

Thus, among recommendations from Vogt (2020) are creating professional learning opportunities for teachers about the assessment and instruction in both language and content for MLs. The PD of teachers in this study was disseminated in the form of a university-based master's in literacy program and focused on both language and content instruction. Master's courses aligned with the four recommendations given by What Works Clearinghouse (WWC) for academic content and literacy for ELs in elementary and secondary grades (Baker et al., 2014) as well as certification for being a literacy teacher, a literacy coach, and English for Speakers of Other Languages (ESOL) add-on certification in the state. These recommendations include focus on academic vocabulary, integration of oral and written language in content-area instruction, writing instruction, and small-group intervention. To understand teacher and corresponding student growth related to these literacy best practices, the researchers examined self-efficacy related to each.

Self-efficacy is important for MLs as it relates to how capable they feel toward their learning and conveys how they will respond to academic difficulties and learning outcomes and how much they will use learning strategies (Deng & Trainin, 2020). Deng and Trainin (2020) studied 112 university students using four vocabulary strategies and rated their self-efficacy for this strategy use. They found students' English proficiency was an important factor in their self-efficacy for vocabulary and that students who were MLs had lower self-efficacy than their English-speaking peers. Taboada Barber et al. (2015) studied a literacy intervention in the social studies content area for MLs and English-speaking students in a middle school by first giving their teachers PD and then evaluating their outcomes. They found changes in MLs' self-efficacy were related to changes in reading comprehension. This research is supported by other researchers (Soland & Sandilos, 2021) demonstrating that, for secondary MLs, self-efficacy may be an important construct to develop in order to lower achievement discrepancies compared to non-MLs. Unrau et al. (2018) reviewed research on reading self-efficacy and intervention. They found that interventions impacted reading significantly regardless of the study design and that "the reading self-efficacy of children in elementary grades may be more susceptible to enhancement than in higher grades" (p. 196).

Self-efficacy is valuable to teachers as well as students, with self-efficacy influencing "teachers' activities, effort, and persistence with students" (Schunk, 2020, p. 157). Teachers with higher self-efficacy are more likely to challenge students, including those with learning difficulties, and are often more experienced (Goddard et al., 2000; Schunk, 2020). Researchers such as Goddard et al. (2000) have studied collective teacher efficacy and found that teacher efficacy may depend on organization at the school level and similar influences such as support from administrators, but this factor was necessary for school reform and improvement as well as student achievement. He and Bagwell (2025) noted self-efficacy for teachers of MLs was an area crucial to the success of MLs, but one lacking research, because pedagogical strategies are not useful without the confidence to implement them.

The final essential element of the DBR project was acknowledgement that the success of multilingual instruction is not dependent upon classroom learning in a vacuum, but needs to value cultural resources (González et al., 2005). Thus, the researchers developed a course for caregivers to support their implementation of literacy practices with community

input, such as suggestions from the advisory council representing key advocates of the ML community; what the teachers in the community were learning through their PD; and families' insights. We use the term caregiver as well as parent and family to denote a holistic perspective of all those who may support MLs in their education (E. Howell et al., 2024; Vega et al., 2026). We hoped to engage community resources to acknowledge the cultural capital MLs and their families bring to literacy learning and support a dynamic relationship between the community and school (E. Howell et al., 2024; Vega et al., 2026). Further, the courses in the PD highlighted the need to support students' cultural resources supported with their full linguistic repertoire as a foundational support for their literacy learning (Mallikarjun et al., 2017).

3.3. Leadership with MLs

If focus on best literacy practices for MLs is limited in educational research (Goldenberg, 2020), then leadership in these practices is teetering on the edge of that gap (McGee et al., 2015). In fact, a search using 134 EBSCO databases for the terms "English learners and literacy and teacher leadership" returned only four texts: two dissertations, one periodical, and one peer-reviewed article. The study found was by Borman et al. (2025) investigating a reading intervention, like Reading Recovery but in the students' home language of Spanish, for first-grade MLs and PD for teachers and teacher leaders. The sample for the study included 170 students from 27 schools across 10 districts and five states. Students with intervention outperformed 82% of control students, but this study focused on the cost analysis of providing intervention for students rather than the leadership development of the teachers providing the intervention. Thus, this work does not address how to prepare teachers to lead literacy instruction for their MLs and other educators. McGee et al. (2015) suggested the following for leadership in ML education in schools: setting goals and direction, providing leaders with knowledge of ML instruction, delivering PD for teachers and those in leadership positions, and empowering ML teaching and learning with support needed. The present study focused on providing teachers with knowledge of ML teaching through their master's program, described in detail subsequently.

Overall, this literature review focused upon the literacy expertise needed for teachers to support MLs, the essential elements of the intervention of this study providing PD for these teachers, and aspects of leadership needed and often missing for those teachers to then lead others in their school and districts to support ML capacity. Next, we address how these components were assessed through our research design.

4. Method

This study used a DBR method (Reinking & Bradley, 2008; Philippakos et al., 2021) with the goal of increasing effective early ML instruction by preparing early literacy teachers to teach MLs and support caregivers of MLs. DBR researchers investigate an intervention to reach such a goal, and our intervention was defined by three essential elements discussed previously in the literature review: (a) provide evidence-based practices of ML instruction in PD, (b) assess self-efficacy for both students and teachers, and (c) develop resources for ML caregivers based on evidence-based practice and teacher feedback. DBR uses iterative research in which micro modifications are made to the intervention, informing larger macro modifications for future implementation cycles. This study centers on the intervention for the first of two cohorts of teachers. DBR was useful in allowing us to investigate how PD impacted capacity for ML instruction and leadership while including and addressing participant and community input (i.e., advisory council). In this article, we focus on the research question: how did the DBR intervention prepare early literacy teachers and leaders for ML instruction?

4.1. Context

The teachers recruited for this study were from six school districts across a state in the Southeastern United States with an ML student population at or above the state average of 6% MLs at the time of recruitment (NCES, 2021). This state is now a *destination state* for Latino immigrants: "States where the foreign-born population grew at or above twice the national rate between 2000 and 2009" (Terrazas, 2011, para. 6). This population growth continues today according to the state's Commission of Minority Affairs in 2025: from 2013 to 2023 in this state those who did not identify as US citizens increased by 27.8%, compared to the national jump of 3.7%. In the districts participating in this study, many languages were represented with the top language other than English being Spanish. Other languages included Amharic, Arabic, Bisaya, French, Greek, Gujarati, Hmong, Kekchi, Lao, Mandarin, Russian, Tagalog, Telugu, Tamil, and Vietnamese. Two districts were classified as suburban, one as a small city, two as rural, and one as a fringe town (NCES, n.d.-b). Most of the districts' populations were White with median household incomes for the communities ranging from $46,000 to $100,000 (NCES, n.d.-a). The state of the present study is currently facing vacancies for ML teaching positions with districts reporting a need to fill 699 certified teaching/service vacancies starting the 2020-21 school year according to a state research agency. This agency reported 25.63% unfilled ESOL positions. Due to these dueling needs of increasing numbers of MLs combined with little capacity to teach MLs, this has designated ESOL as a critical need area.

4.2. Participants

We used purposive sampling to reach early literacy teachers with six hours of advanced literacy training as potential leaders in their school districts who did not yet have an ESOL certificate nor a master's degree in literacy (Cash et al., 2022). In fact, none of the participants had passed either the literacy or ESOL Praxis exams required for certification at the state level in these areas. The population was reflective of advanced literacy leaders in the state in that it was majority White and female. These participants had the potential to lead MLs in literacy instruction but desired more PD in ML instruction and literacy. Seventeen were between 31 and 45 years of age, six were between 46 and 60, and two were between 18 and 30. None of the participants considered themselves bilingual, but three reported some proficiency in another language. They had a wealth of teaching experience, with the average years being 16–20. We recruited 25 participants but one had to drop out of the program in her fifth semester due to personal reasons; thus, we maintained a 96% retention rate throughout their two-year program. We did not include the data of this participant for the last two semesters.

4.3. Data Sources and Analysis

The study used mixed methods of data collection common to DBR (Reinking & Bradley, 2008). We used three surveys and a teacher log, including qualitative and quantitative questions collected each semester over a two-year period and exit interviews with teachers at the end of the intervention.

4.3.1. Data Sources

The following section describes each data collection instrument.

Surveys: We used surveys to gather data from teachers, principals/supervisors, and students. The teacher survey included five-point Likert scales for teachers to report their levels of knowledge, self-efficacy, and implementation of literacy practices for MLs based on Baker et al.'s (2014) recommendations. Open questions inquired about their PD needs, their learning in family engagement practices and leadership, and recommendations for

the course for caregivers. Teachers' supervisors filled out a district survey that mirrored the quantitative scale in the teacher survey and included qualitative data about observed teacher strengths and weaknesses. Finally, the students of the participating teachers took a survey that consisted of a five-point scale, going from 'cannot do at all' to 'highly certain can do' to report their self-efficacy for practices, such as understanding the meaning of new words, understanding the meaning of informational texts, or writing about texts they have read. Open questions included how they received help from the teacher and sharing any areas of difficulty about the literacy practices.

Teacher log: This log recorded a day of the teachers' practice focused on ML instruction. Quantitative data included rating self-efficacy items or describing instructional activities, materials, or goals from multiple options. Qualitative data included description of collaboration with colleagues, student needs, and future plans for instruction based on identified needs.

Exit interviews: Twenty-four teachers were interviewed by members of the research team during their last semester of the program. Questions required teachers to assess if their goals for the program had been met, share valuable learning experiences about teaching MLs, and explain how they were using or planned to use what they learned. Interviews were recoded and then transcribed and they ranged from approximately twenty minutes to an hour.

4.3.2. Data Analysis

Analysis of this data consisted of concurrent methods in which the quantitative and qualitative data were analyzed separately and then brought together to inform findings (Creswell & Clark, 2017). The quantitative data from these instruments were analyzed using paired *t*-tests. To evaluate the magnitude of the standardized difference between the mean scores while correcting for the upward bias of standard effect-size estimators in small samples, Hedges' *g* was calculated (Lakens, 2013). It expresses the magnitude of change in standard-deviation units, making it independent of the original measurement scale and comparable across outcomes. The effect size estimated in this analysis can be interpreted using established magnitude thresholds: 0.2, 0.5, and 0.8 represent small, medium, and large effects, respectively.

Qualitative data included open-ended responses from the teacher surveys and logs and exit teacher interviews conducted in the final semester to gauge growth from the needs assessment. Analysis of this data involved grouping initial thoughts and actions into initial codes, forming themes, which were then organized in focused codes. These focused codes were compared with quantitative data when relevant and shaped by theoretical perspectives to form theoretical codes, but not all theoretical codes included quantitative data (Charmaz, 2014). See Table 1 for theoretical codes on the left to initial codes and their references from the data on the right.

4.4. Intervention and Modifications

Participants were enrolled in an online master's in literacy program, taking 36 credit hours inclusive of coursework toward three certifications: literacy teacher, coach, and ESOL. Each semester, participants completed six hours of coursework for a total of six semesters. This coursework included five courses (15 h) toward their ESOL certification, three courses toward their literacy teacher certification (9 h), two courses toward their literacy coach certification (6 h), and two courses toward literacy coaching and pedagogy required for their master's degree (6 h). The micro modifications made for the initial cohort were based on participants' ongoing feedback and included designing PD content in the form of online modules: writing, translanguaging, and understanding SoR training

in terms of ML instruction. In addition, informational resources were provided on the following topics: understanding and communicating district ML resources, ML cultural and linguistic resources, supporting newcomers, communicating with caregivers, collaborating with colleagues, and highlighting PD for the participating teachers' administrators (E. Howell et al., 2025). Suggestions for macro modifications are included in the discussion.

Table 1. Initial, focused, and theoretical codes.

Theoretical	Quantitative Data	Focused	Initial (With Number of References)
PD and literacy background and growth		PD growth overall	Benefitting from program, 14
			Describing goal for program, 26
			Discussing impactful coursework, 40
			Explaining how goals were met, 21
			Implementing technology, 2
			Meeting goals through program, 9
		Making change	Collaborating between teachers, 20
			Making modifications to participant perspective, 51
			Making personal connections to teacher lives, 2
			Responding to modifications made, 37
ML expertise: strategies and context	Teacher knowledge and self-efficacy statistically significant gains from teacher survey	PD growth with ML instruction	Defining evidence-based practice for MLs, 28
			Describing confidence in ML instruction, 45
			Describing ML population, 3
			Describing typical ML practices, 23
			Gaining pedagogical knowledge for MLs, 28
			Taking the Praxis, 3
			Teaching MLs prior knowledge, 2
			Using learning in future practice, 21
	Student growth, statistically significant from pre- to post-intervention across three semesters from student survey	Understanding ML student and caregiver context	Desiring further caregiver interaction, 7
	Confidence in student literacy and content knowledge, statistically significant change from teacher survey		Gaining more interaction with caregivers, 8
	Confidence in suggestions for caregiver courses, statistically significant change from teacher survey		Identifying student needs, 2
			Interacting with caregivers, 62
			Listing district ML resources, 9
			Suggesting content for caregiver course from teachers, 1

Table 1. *Cont.*

Theoretical	Quantitative Data	Focused	Initial (With Number of References)
Burgeoning, hesitant leadership	Statistically significant change across constructs of four WWC practices (vocabulary, content instruction, writing, and small group) in leadership	Leadership identity	Gaining new positions, 11
			Leading other teachers, 78
			Needing more time for leadership development, 1
			Reactions of nonparticipant teachers, 2
			Setting goals specific to leadership, 1
		Identifying district need	Describing district PD needs for MLs, 36
			Describing needs of further PD, 12
			Explaining current priorities of ML PD in district, 1
			Needing further PD for participants, 9
			Needing further PD with teachers and caregivers, 5

5. Results

Results show the relevance of PD in terms of teacher literacy background and growth, their ML expertise, and their assumption of leadership. These results explore theoretical codes, based on both quantitative data and focused thematic coding seen in Table 1.

5.1. PD and Literacy Background and Growth

M. Coady et al. (2011) and M. R. Coady et al. (2016) discuss teacher knowledge and background as a fundamental component of teacher knowledge for MLs. We build upon that as we look at what participants needed in terms of MLs and their response to the PD intervention. When discussing their goals for this project, the participants felt confident overall in their teaching but wanted more experience applying this learning for MLs. For example, Sophia (all participant names are pseudonyms) was an interventionist with many years of teaching experience, yet she explained:

> I feel my goals for this grant was to learn how to teach in more diverse classrooms. We've seen definitely an increase in our ML population within my school district, and I felt I was a great teacher, but making those kids successful in my classroom was really hard because I didn't know the strategies to effectively support these students.

This quote is representative of most of the teachers, who not only wanted to improve for their students, but also wanted to lead other teachers in their district. For example, Emma, another experienced teacher, discussed her desire for leadership:

> Yes, I think one of the biggest goals was really understanding and reflecting on my knowledge of those multilingual learners or really lack of knowledge. I felt fairly decent about the reading intervention aspect of it, but obviously I was very interested in the coaching dynamic.

Rose, an elementary school interventionist with over 15 years of experience, described that this potential for growth in leadership of other teachers for ML learning had not been a previous offering:

> And that was something that I didn't know a lot about, just because the PD... I don't really remember any professional development centered around ESOL students and how to help them so I just thought that I would be another person

> in the building that teachers could come to if they were needing supports or ideas on what to do in the classroom.

Discussing impactful coursework toward this leadership, there was a resounding response that one of the most impactful courses was the practicum experience. As practicums are increasingly online, research has called for a study of their impact (E. S. Howell et al., 2020). The majority of the teachers discussing how the PD met their goals mentioned the practicum as being impactful. In one practicum class the teachers went through rounds of instruction where they recorded their lesson working with an ML student and received coaching from the instructor and colleagues in the class and self-reflected on their lesson. The teachers also completed a practicum on coaching during the program. Grace, an experienced interventionist, discussed the benefits of this process:

> I think the practicum that I did last spring, I think it was last spring. At the time it was a little overwhelming [laughter], but it was very helpful and very useful, as far as helping me kind of look at best practices and where to start and where to go with the students. So, I probably felt like that was very beneficial, that practicum, videotaping myself, watching that video and realizing, 'Oh man, I should have said this, I should have asked that.' I think it was very reflective, and I don't think I do enough of that, reflecting. So, I feel like that was a good experience.

Other teachers discussed the benefits of such "hands-on" learning that was perhaps only possible in their in-service roles:

> I think this would be very difficult to do if I wasn't immersed in teaching. I definitely think the day-to-day implementing what I'm learning made a big difference, because, as I implemented the strategies, if I had questions, I could go back and talk to the instructors and say, 'Hey, I tried this and I just didn't seem quite right. Did I do it right?', or whatever, or 'Was there something better I could've done?'

However, flexibility and modifications were necessary and impactful. In the initial code, *Responding to Modifications*, the participants discussed implementing content from multiple modifications described previously. Regarding the translanguaging module, Samantha, a first-grade classroom teacher, described why that was, for her, the most impactful of the modifications made to support the PD curriculum:

> All were very helpful, but I think the translanguaging during the writing was like a big a-ha moment for me, that you can use your own language, you can do it native plus English. I loved that, that was a really strong one that I really felt was very beneficial.

Regarding the SoR and writing modules, Nancy, a literacy coach, described both the benefit of tying them into her context and the curriculum she was being provided, and addressing high-need areas:

> Everything's the Science of Reading so it allowed me to build my capacity in that area with multilingual learners, and the writing module is just. . . I feel like that we neglect writing very, very often. And that it just provided me with good reminders and refreshers and strategies to help support, not only multilingual learners, but all of our students and teachers as writers. And teachers of writing.

Another modification needed was collaborative opportunities between literacy and ML professionals, so a micro modification made was coordinating with a partner district the participation of their interventionists in our program in a book study with ML educators. The response to this modification was discussed in the code *Collaborating between Teachers*.

Teachers asserted it was not necessarily the content learned in this modification but the perspective shared across these groups that was most impactful.

Thus, the data in this focused code showed that literacy professionals, even those that are experienced and had advanced coursework in literacy, needed and grew from literacy coursework tailored to MLs, and they needed this content knowledge as well as opportunities to experience leadership in this area. This learning was better when it was hands-on, and participants appreciated and used modules modified for their specific needs and context. Next, we look at how their ML expertise grew.

5.2. ML Expertise: Strategies and Context

Two focused codes merged to form the theoretical code *ML Expertise, Strategies and Context*: *PD Growth with ML Instruction* and *Understanding ML Student and Caregiver Context*. Both describe literacy professionals learning more about what M. Coady et al. (2011) and M. R. Coady et al. (2016) described as teacher knowledge of teaching processes and of MLs as students, areas of teacher learning needed for MLs in addition to the aforementioned teacher knowledge and background. Regarding their knowledge of teaching processes specifically for MLs from the teacher survey, the teachers had statistically significant growth in both knowledge and self-efficacy on the averaged 16 literacy items reflecting vocabulary, oral and writing instruction in content-area teaching, writing, and small group instruction for literacy of MLs (see Table 2 for teacher growth across literacy items). This growth was consistent at a statistically significant level across four semesters but did not become significant with a large effect size until their third semester in the program, suggesting the duration of content was important as suggested by research on the necessary components of PD (Darling-Hammond et al., 2017; Desimone, 2009; E. Howell et al., 2018). The teachers' qualitative responses supported this quantitative growth. The two most frequently referenced initial codes within the focused code *PD Growth with ML Instruction* were *Describing Confidence in ML Instruction* and *Gaining Pedagogical Knowledge for MLs*. Samantha, a first-grade classroom teacher, described her confidence growing from reading and then implementing research:

> Learning from the coursework and then being able to take that and put it into action. I mean, I would read this article about what this researcher did or use this tool and immediately the next day I would try to fit it in, in our lessons. And I could see it benefiting the students right then and there.

Table 2. Teachers' overall average growth across literacy items.

Construct	Needs Assessment (n = 25)	Sem1 (n = 25)	Sem2 (n = 25)	Sem3 (n = 25)	Sem4 (n = 25)	Sem5 (n = 24)	Sem6 (n = 24)	% Growth (Needs Assessment—Sem6)
Knowledge	4.26	4.26	4.50	4.81 *	4.68 *	4.78 *	4.96 *	16% *
Knowledge Effect Size		0.02	0.49	1.03	0.87	1.06	1.03	
Self-Efficacy	3.75	3.89	4.19	4.57 *	4.37 *	4.33 *	4.69 *	25% *
Self-Efficacy Effect Size		0.26	0.70	1.31	0.87	0.95	1.48	

Note: * indicates statistically significant difference from the baseline term at 0.05 sig. level from the teacher survey. Sem is short for semester.

Repeatedly, teachers mentioned the importance of learning specific strategies, but also about knowing their MLs. For example, Margaret, an elementary-school interventionist, discussed going beyond just academic strategies:

> Knowing who they are and what they already know, being able to use their language to help them with our language. . . Whereas before, I've been teaching, this is my 25th year teaching, I've had ML students in my classroom every year, and I would always try to help them, but I never looked through the lens of the actual cultural aspect and the language aspect.

Marcia, another school interventionist, described this increased confidence impacting how she viewed MLs:

> I mean, that part of my thinking has changed. It's not, "I have to work with these students," "I get to work with these students." Not, "I have to figure out how to communicate with their families," but now "I get to communicate with their families."

Lorraine, another interventionist, described how this gained confidence changed her treatment of intervening for MLs:

> In the past, when I had multilingual learners in my school building, I very rarely pulled them, because they were. . . with the ESOL teacher. . . And now in the last year, year and a half, it's really been, "Let's get them at the early stages and work with the ESOL teacher" so they're getting classroom, they're getting ESOL, and they're getting me as well.

Samantha discussed in *Gaining Pedagogical Knowledge for MLs* the need for learning and strategies in relation to self-reflection on biases, inclusion of cultural materials for her students, and understanding their language, embracing it, and starting with comprehensible input for her students.

The aforementioned knowledge of students and their culture and language also speaks to the teachers' gained knowledge of their MLs and families. In the code *Understanding ML Student and Caregiver Context*, teachers discussed understanding student needs and resources for them but also focused on their caregivers. The most frequently coded initial code within this focused code was *Interacting with Caregivers* in which participants discussed learning translation tools, being more conscious of giving parents information in their languages, but also about being more dynamic in their relationships with caregivers. For instance, Samantha explained: "I want just them to come in, have fun too and enjoy not letting school be this scary place, or I don't know. We just need to make that bridge stronger." Julia, another participant, described the importance of conversations with caregivers:

> I think it was one of the courses where we really had to have a conversation more in person versus just, we use a lot of like the Remind app and things like that, but having a conversation. . .I really enjoyed it because I could get to hear their voice, and get to hear their tone, their excitement and their concerns. I might not be able to understand the words as they're speaking in their home language, but I could tell their feelings behind it, and that was really, really eye-opening.

Several points of quantitative data support this qualitative discussion of increased knowledge of both learning strategies for MLs and knowledge of MLs, including student survey data and data from the teacher survey in which teachers made suggestions for a future caregiver course, helping the caregivers support their ML student's literacy. Regarding student outcomes, the student survey showed all students, including MLs, recorded statistically significant growth at the 0.05 level in average overall scores from pre- to post-intervention in three semesters: the second, third, and fifth. The ML student population surveyed ranged from 15 to 20% in the semesters administered. The students did not complete surveys in the teachers' second and fourth semesters due to it being the summer semester and the students being out of school. This growth was supported by the teacher

survey which showed their confidence in student literacy (third, fourth, fifth, and sixth semesters in the program) and content knowledge (third, fourth, fifth, and sixth semesters in the program) increased at a statistically significant level with a large effect size. However, this change did not happen until further into their programs, suggesting once again the importance of the duration of PD. The teachers were also asked to give suggestions for a caregiver course to support student literacy. Their quantitative ranking of their ability to make these suggestions grew as they described qualitatively getting to know students and caregivers better (see Table 3 for the quantitative scores of teacher ability to provide input for the caregiver course). These recommendations qualitatively showed increasing awareness of strength-based perspectives towards families' cultural and linguistic assets (Vega et al., 2025).

Table 3. Teachers' ability to provide input on developing course content.

	Needs Assessment	Sem 1	Sem2	Sem3	Sem4	Sem5	Sem6
Average Rating	3.04	3.32	3.76 *	4.24 *	4.08 *	4.29 *	4.42 *
Effect Size		0.29	0.78	1.27	0.99	1.35	1.37
n	25	25	25	25	25	24	24

Note: * indicates statistically significant difference from the baseline term at 0.05 significance level from the teacher survey. Sem is short for semester.

One limitation is that this teacher growth was not triangulated in the district survey completed by their supervisors. Regarding overall teacher knowledge, from the needs assessment to the final semester, the average knowledge ratings of teachers by their supervisors decreased by 2.3%. Based on a paired *t*-test, the difference is not statistically significant at the 0.05 level. Regarding self-efficacy in the district survey, the results also noted a slight decrease of 2.3%. While not significant, it is important to note the lack of alignment, elaborated on in the Discussion.

5.3. Burgeoning, Hesitant Leadership

While M. R. Coady et al. (2016) discuss the three components needed for knowledge of teaching and learning for MLs—teacher background and experiences, teacher knowledge of teaching and learning, and knowledge of MLs as learners—they do not address the leadership needed to support the implementation of this knowledge in schools. We began asking teachers in their fourth semester about not just their self-efficacy, knowledge, and implementation of literacy practices for MLs, but also their self-efficacy for potentially leading PD or coaching colleagues on these topics. As shown in Table 4 through confidence levels, participant leadership did not significantly change until their final semester with a moderate effect size in the intervention, suggesting that duration was an important element in establishing teachers who not only feel confident in ML literacy practices, but who also feel capable of leading.

Leadership Identity was a focused code in the qualitative data as well. This focused code showed participants were gaining new leadership positions in their districts and leading other teachers but were still hesitant to identify as leaders and set goals for future leadership. *Leading other Teachers* and *Gaining New Positions* were the most frequently referenced initial codes composing this focused code. At the time of the exit interview, five different participants discussed changing positions, three moving into ML specialist roles and two becoming literacy coaches or interventionists, suggesting their growing leadership in both areas of ML and literacy practice. The teachers who gained new positions cited their new content expertise as giving them the confidence and drive to assume a new position. For instance, Barbara, who moved into an ML position, said "I have increased

my knowledge greatly." Similarly, Emma, who changed from a classroom teacher to an interventionist, described her needed confluence of ML and content knowledge: "Because I had the ESOL background from this program. . . so this one kind of hit reading and ESOL which was golden for the population that we had." Others expressed interest in applying for new positions based on their increased confidence from gained knowledge, such as Kimberly: "There is a position open that's early literacy, family engagement leader. I think I would be great at that so hopefully I get an interview. Everything I've learned from this grant I can do it." Others were hesitant in their discussion of leading other teachers or calling themselves leaders.

Table 4. Teachers' level of confidence in successfully leading.

	Average Confidence Level		
	4th Semester	**5th Semester**	**6th Semester**
Teach a set of academic vocabulary words intensively across several days using a variety of instructional activities.	71%	70% ES: −0.06	83% * ES: 0.70
Integrate oral and written English language instruction into content-area teaching.	72%	69% ES: −0.10	83% * ES: 0.60
Provide regular, structured opportunities to develop written language skills.	74%	70% ES: −0.18	84% * ES: 0.62
Provide small-group instructional intervention to students struggling in areas of literacy and English language development.	83%	81% ES: −0.08	90% * ES: 0.48
n	25	24	24

Note: * indicates statistically significant difference from the fourth term at 0.05 significance level from the teacher survey. ES = effect size.

While teachers did not want to necessarily deliver whole-school PD, they were sharing ideas with other teachers who sought them out for advice. As one participant, Ashley, described: "It's been more informal, just through various conversations." She also discussed how their school was trying to use professional learning communities to incorporate teacher-led PD for one another. However, the less frequently coded initial codes of this focused code, *Needing More Time for Leadership* and *Setting Goals for Leadership*, showed that even though the focused code of *Identifying District Needs* showed teachers were aware of the PD needs of their district, they were still hesitant to call themselves leaders and address those needs. For example, Elizabeth, a classroom teacher, described her district need of teachers learning more about connecting with families. However, though she recognized that need, when asked if she felt comfortable leading, she laughed and said: "Me? I don't know." Instead of leading PD, she was more secure collaborating with teachers: "I think I've learned more about how to assist teachers, of telling them what to do, kind of bringing the ideas out from them, and trying to work more as a team of to help the students learn."

6. Discussion

Building upon teacher leadership frameworks (Fairman & Mackenzie, 2015; Lieberman & Friedrich, 2010), we thread discussion of the findings with implications for both the practice of PD and future research, building on the micro modifications of this study and looking toward the macro modifications needed in the future.

6.1. Implications for Practice

Kayla, a classroom teacher, when asked about why she said stepping into leadership was something she wanted but was daunting, described her conflict:

> Just in general I wouldn't say I have any big leadership role or anything like that... I kind of asked to pump the brakes just because I was a little overwhelmed... So I've been really just trying to work very hard to hone into my leadership skills, working with adults, things that, on top of my academic knowledge also, just overall well-rounded for the future in general, working with parents, things like that, working with other admin, things like that, as much as I can, whatever's in my control.

Kayla is representative not only of other participants in this study but also of many experienced teachers who may already be literacy professionals, but who are hesitant to label themselves as leaders, particularly in new areas of practice such as working with MLs. However, we saw from the experiences of teachers in this study that their leadership was often multidimensional, collaborating with other teachers on matters of both literacy and ML practice. They took on roles of emerging coaches and ML advocates, moving from literacy to ML leadership, or co-leading in literacy and ML practices, but preferred collaborative leadership roles rather than hierarchical forms of leadership. Further, their growth was over a six-semester duration, and they did not seem to recognize their growth until the final semester of their PD though they discussed how pivotal their new knowledge was to their conception of leadership. This reluctance was even as their self-efficacy and knowledge grew for these practices.

This delayed connection between content and leadership learning suggests that leadership is not intuitively linked to growth, and teachers may need help by recognizing their expertise and linking it to leadership potential. While this study affirms previous research, such as M. R. Coady et al.'s (2016) finding that knowledge of teaching and the learning of MLs is important for teachers being prepared to teach MLs, it also points to the need to explicitly connect and support this developed content knowledge with leadership potential. The participants in this study focused on their gained knowledge as a basis for future leadership. Further, efforts need to be made to make room for more multidimensional roles in leadership that blend areas of expertise such as literacy and ML practice and allow for informality and flexibility (Yoon, 2023). The teachers in this study were within the spheres of leadership identified by Fairman and Mackenzie (2015), especially building and sharing pedagogical knowledge. However, this knowledge was not necessarily recognized. For example, even though results showed teachers growing in statistically significant ways with large effect sizes starting in their third semester in the knowledge and self-efficacy that they believed prepared them for leadership, the views of leaders in their own schools were seemingly not aligned. The district surveys showed that the supervisors of the participants were not seeing significant change in their participating teachers from the intervention baseline to the final semester in either knowledge or self-efficacy, which is a different story than the data from teachers and their students tell. Thus, there may be room for administrators to discuss learning and leadership opportunities with their teachers, and this was a macro modification noted for the second cohort of teachers. Teacher expertise is fundamental to advancing teaching and learning, and principals are a strong influence on their potential leadership, so we made a modification to explicitly invite principals/supervisors to encourage teachers with leadership opportunities in the future (York-Barr & Duke, 2004). Further, not mentioned in Fairman and Mackenzie (2015) but noticed in this research, was the potential and need for these participants to merge previously siloed areas of expertise such as literacy and ML practice. Thus, another sphere of influence that this research adds that future practice and studies should address is building bridges as a sphere of leadership impact that goes beyond collaboration and breaking "barriers of teacher autonomy" to warrant more intentional mergers (Fairman & Mackenzie, 2015, p. 69).

These implications for practice can inform pedagogical considerations in teacher education programs. Concretely, coursework can make explicit connections between teacher expertise and leadership competencies in assignment and discussions. For instance, different types of leadership can be explored, including distributed approaches that are more collaborative in nature and merge areas of expertise. Teachers can identify their instructional growth points and recognize ways and areas in which they are already leaders or can influence their schools through advocacy, mentoring, and new initiatives. Taking this perspective can help teachers recognize that leadership is a process that they may already be practicing. Another way to scaffold leadership through a program can be to examine district expectations for their emerging leaders or those who can influence decision-making, particularly in ML-related matters. In our research, we observed this disconnect between administrators and teachers. It would be helpful to have both stakeholders in dialog so that teachers can communicate their learning and how that can contribute to their immediate context while administrators can clarify needs and role expectations.

6.2. Implications for Research

Regarding implications for research methods, there is a need in both literacy research overall and multilingual research in particular to overcome deficit-based thinking that has saturated this research to date (McCarty et al., 2021). Atkinson (2002, p. 539) suggested that although quantitative, experimental, or quasi-experimental research has a place in researching language development, "studying real humans in real human contexts and interactions, including classrooms, entails methodologies that do not denature phenomena by removing them from their natural environments." DBR is a method that allows researchers to not only study an intervention and how it works in participants' ecological context, but also to make modifications for their specific needs (Reinking & Bradley, 2008). This type of research proved important here for the modifications made within the intervention, specifically the micro modifications made within the first cohort as participants had specialized knowledge they were blending. For example, these trained literacy teachers desired not only more PD in writing, but in particular found the PD on translanguaging specific to ML writing instruction to be a helpful modification. Further, modifications are still needed; as these participants advance toward thinking of themselves as leaders but hesitate to identify with traditional roles of leadership, they will need open dialog and conversations at their respective schools for where they can lead confidently rather than the burgeoning leadership discussed herein. We worked within this study to merge opportunities for leaders in literacy and MLs to work together that were previously siloed, yet the data here show that school leaders were still not recognizing the leadership the teachers saw within themselves.

Thus, this type of research was necessary not only to see quantitative data on where teachers were making gains and needing more support, but also to hear their voices in the qualitative data and, perhaps more importantly, be able to respond to those needs. We encourage future researchers to use methods that incorporate participant voice and the flexibility to respond to it. Such research methods often need specific considerations when focusing on MLs, such as partners capable of understanding MLs' cultural and linguistic assets (McCarty et al., 2021) that may be missing from current research methods.

While this study combines robust data collection methods for a prolonged period to measure teacher learning, it is not exempt from limitations. As acknowledged by Desimone (2009), duration is a critical element of effective professional development. The results from this research also show that teachers started to experience confidence in their leadership potential towards the end of the intervention. This delayed shift implies that more time could be beneficial to explore the development of leadership skills. Within

a grant-funded research context, this extension may be challenging as it requires extra resources and extensive participation from teachers. However, one way to address this is to conduct follow-ups with teachers and district leaders to examine after-intervention impacts. We have done this through additional surveys with some degree of success, but incentives may be necessary for more participation. Additionally, our sample was specific and small, including teachers with specialized literacy knowledge. Even though the size and the expertise of this cohort may not yet allow for generalization, our study includes sound statistical measures and fulfills its purpose of building ML capacity. This research complemented teachers' advanced literacy knowledge with evidence-based ML instruction through ESOL certification.

7. Conclusions

MLs are a growing and vital student population. Looking at just their economic impact, 90% of U.S. employers rely on multilingual employees and predict this demand will grow in the future, suggesting their importance in a globalized economy (ACTFL, 2019). Yet, there is a national shortage of teachers to prepare these students, and even fewer leaders to help develop these teachers (McGee et al., 2015). This research shows that even teachers with advanced training in literacy may not feel adept at addressing the needs of MLs (E. Howell et al., 2025), yet with PD they can gain the pedagogical knowledge and self-efficacy necessary to support these students. Further, these teachers will need to carry that knowledge forward in their respective schools and districts by becoming leaders. Despite leading through coaching and PD in their schools, they may resist labeling themselves as leaders and need collaborative, multidimensional roles and venues to display this leadership. The present study adds to research such as Fairman and Mackenzie (2015) showing confidence is needed by describing how PD addressed such self-efficacy gaps and also the sustained duration required for such efforts. Further, research methods to meet the needs of MLs and their teachers must be similarly dynamic. This study addresses the research gap in leadership for MLs by identifying the specific needs of teachers of MLs, how those needs were addressed including research methods that identified and addressed modifications made and needed, and discussing their progress toward leadership. We not only address the areas of ML instruction that teachers need but also what is neglected for potential leadership (M. Coady et al., 2011; M. R. Coady et al., 2016) and suggest an additional sphere of influence, building the existing research base (Fairman & Mackenzie, 2015).

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