Unpacking K-12 Teachers' Understandings of Academic Language

Sabina Rak Neugebauer & Amy J. Heineke

Abstract

Academic language pervades educational standards and teacher evaluation systems for teacher licensure and is a skill that all educators across grades must teach. Despite its common use, this term may be less understood in schools. This article explores a mixed-method study to examine differences in K–12 teachers' knowledge of the linguistic characteristics of academic language, motivations for incorporating academic language instruction, and their interpretations of this term. Survey data and open-ended responses were collected from 322 teachers, multiple regression was employed to explore teachers' academic language knowledge and motivation, and content analysis was used to examine teacher interpretations of this term. Results indicate that teachers with language development–focused endorsements had higher motivation than those without and that teachers with less knowledge conceptualized academic language as unidimensional or in ways that privileged certain students.

Sabina Rak Neugebauer is an assistant professor of teaching and learning in the College of Education at Temple University, Philadelphia, Pennsylvania. Amy J. Heineke is an associate professor of bilingual and bicultural education in the School of Education at Loyola University, Chicago, Illinois.
Email addresses are: sabina.neugebauer@temple.edu & aheineke@luc.edu

Introduction

Students in the United States continue to struggle in accessing the language of school texts (Snyder, de Brey, & Dillow, 2018). According to the National Assessment of Educational Progress (2017), 60% of fourth graders fall below grade level in reading. One explanation for these low levels of reading success is students' lack of knowledge of academic language—the vocabulary, syntax, and discourse associated with the disciplines—an essential skill for students' literacy development (Bailey, 2010; Scarcella, 2003; Uccelli, Galloway, Barr, Meneses, & Dobbs, 2015). Oral and written language specific to math, science, social studies, and English language arts facilitates students' ability to access, communicate, and think about content in these subject areas (Nagy & Townsend, 2012). Higher levels of this specialized language are associated with increased reading comprehension as well as academic achievement outcomes broadly (Townsend, Filippini, Collins, & Biancarosa, 2012). The positive relationship between academic language and other performance outcomes makes this skill a critical area for teacher instruction.

Accordingly, schools are increasingly focused on bolstering students' knowledge of this important skill, standards in the Common Core widely cover this term (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010), and teacher evaluation systems tied to licensure for teachers in training now include practices on academic language (Stanford Center for Assessment, Learning, and Equity [SCALE], 2018). As a result, *all* teachers—single-subject (secondary) teachers, multiple-subject (elementary) teachers, and teachers of students learning English as a second language (ESL)—are tasked with teaching academic language and supporting students' understanding and application of academic language.

Yet, teachers' understanding of this term and their motivation to integrate it into their classroom instruction may not be as robust as the instructional need (DiCerbo, Anstrom, Baker, & Rivera, 2014). That is, while the term *academic language* is frequently used in schools—albeit with little consistency (Zwiers, 2008)—how practitioners make meaning of this concept remains less understood (Bailey, 2010; Valdés, 2004). The absence of research on how teachers define and interpret *academic language* with regard to their own practices is troubling, given that successful implementation of language instruction depends on teachers' understanding of the conceptual underpinnings of language strategies (Neugebauer, Coyne, McCoach, & Ware, 2017) and their motivation to use language practices (Shahid & Thompson, 2001). Research in other areas of language instruction has indicated that for teachers to be successful in implementing language practices, they must deeply understand the principles of language learning, a level of understanding that may not be achieved by certain amounts of professional development or particular types of teacher training (Toth & Moranski, 2018). The expectation in schools is that all educators will implement academic language practices, yet teachers' varying levels of expertise

may pose challenges to meeting this goal. Thus it is essential to address the existing knowledge, understandings, and motivations of teachers across the profession to support the successful implementation of academic language practices and identify areas for further improvement (Heineke et al., 2018).

Therefore the present mixed-method study addressed two central aims. First, this study explored quantitative differences in K–12 teachers' knowledge and motivation for teaching academic language, specifically their perceived competence and importance of teaching academic language in classrooms. Second, this study qualitatively captured how K–12 teachers define academic language to understand patterns of interpretation that may influence how teachers take up academic language in their everyday practice. Moreover, this study explored these two aims with teachers across the teaching profession, including educators with varying types of teacher preparation and professional development, experiences that likely influence their existing knowledge, definitions, and motivations for engaging with this essential skill set.

Teacher Knowledge and Motivation for Academic Language

While the importance of academic language for students is well documented (e.g., Uccelli et al., 2015), educators' knowledge and motivation for academic language instruction are less charted in the literature. Extant studies focused on the teacher as the unit of analysis centered on (a) academic language interventions (DiCerbo et al., 2014) or (b) instructing English learners (ELs; Bailey, 2010). Work to support all teachers in bolstering academic language has emphasized the complexity of this concept as a barrier for its implementation and use (Nagy & Townsend, 2012). According to Bailey (2010), for teachers to engage in instruction that adequately addresses this multifaceted construct, teachers must be "thinking and acting linguistically" (p. 608). It stands to reason that for teachers to act linguistically, or instruct with explicit focus on language, they must understand multiple linguistic characteristics, that is, the multifaceted nature (i.e., vocabulary, discourse, syntax) of this language register (Turkan, De Oliveira, Lee, & Phelps, 2014). While teachers across grades and content areas are tasked with *thinking linguistically* so they can *act linguistically*, existing research has provided compelling evidence that teachers may be more or less equipped and motivated to think and act linguistically based on their preparation.

In this section, we situate our study in the extant literature, including subsections focused on the potential differences between teachers' knowledge and motivation for language-related instruction as a function of their training as well as teachers' interpretations of academic language. These studies, focused primarily on teachers of linguistically diverse students, have provided a springboard for the present investigation to capture this phenomenon in the larger teacher population with more diverse types of training.

Knowledge Differences Among Teachers

The multitude of policy initiatives, curricular mandates, and instructional strategies constantly being implemented in schools makes it so teachers are frequently balancing various pedagogical priorities. It makes sense that a teacher's preparation may influence which of the myriad policy initiatives they take up and attend to over competing demands (Pence, Justice, & Wiggins, 2008). While those prepared as bilingual and ESL teachers have likely developed extensive knowledge and skills related to academic language, beyond these specialists, "language is not considered by most mainstream teachers to be the principle [*sic*] core content of their professional practice" (Bunch, 2013, p. 307). Indeed, Wong-Fillmore and Snow (2000) and Turkan and colleagues (2014) posited that teachers with knowledge of linguistics are more likely to understand which discourse features of academic language to highlight in instruction.

Existing research has indicated that teachers with knowledge of language learning and proficiency may be better prepared to attend to linguistic features of academic language in instruction. For example, Hopkins (2013) found distinctions between bilingual and monolingual teachers' ability to address features of academic language. Specifically, bilingual teachers described using contextualized language to support teaching and learning, such as (a) encouraging students to "talk like scientists" (p. 365), (b) helping students make connections between words, (c) emphasizing ways to use language for different purposes, (d) facilitating repeated practice of academic English, and (e) drawing students' attention to different voices and registers in writing. Bilingual teachers described and used these core research-based academic language instructional practices (Nagy & Townsend, 2012) more frequently than monolingual peers. Hopkins's (2013) findings provide evidence that bilingual teachers—who focus on language in their everyday practice—may already be aware of and attend to academic language, as compared to monolingual peers, who are typically less attentive to these language features.

Differences in ESL and bilingual teachers' expertise may also indicate that preparatory experiences related to academic language tend to focus specifically on ELs. Definitions, terms, and labels for academic language have varied over time, but for decades, the research and instructional recommendations for academic language prioritized ELs (Bailey & Heritage, 2008; Scarcella, 2003). Initial conceptualizations of this term were developed to contrast the language register of academic tasks with that of social activities to shed light on discrepancies between ELs' competencies with language associated with social versus school-based tasks (Bunch, 2006; Cummins, 1980). Over time, the label for this concept has changed, but the underlying thread is a focus on the demands of content-area language and knowledge for ELs (Bailey & Heritage, 2008)—with more recent research supporting these skills with all students regardless of English proficiency (Nagy & Townsend, 2012). The long-standing history of the term *academic language* in the

EL literature means it has been and continues to be an essential part of ESL and bilingual credential programs (Collier, 1985; Cummins, 2000). However, despite the current emphasis on academic language instruction for all, the integration of related theories and practices has not received the same emphasis in teacher preparation programs for content-area teachers (Lucas, Villegas, & González-Freedson, 2008). The majority of initial teacher preparation programs are just beginning to include academic language in their curricula, beyond teachers who work with ELs or specialize in reading instruction (DiCerbo et al., 2014).

To address differences in preservice training, school administrators have used professional development to increase teachers' knowledge of linguistic demands. Continued training for in-service teachers has been proposed as having the potential to deepen knowledge and investment in academic language in classrooms (Téllez & Waxman, 2006; Wong-Fillmore & Snow, 2000). Yet, work on the impact of this professional development is still in its infancy (DiCerbo et al., 2014). Initial studies have primarily explored knowledge of academic language generated by subject-specific professional development (e.g., science), but scant research has explored a range of teachers with different types and amounts of training (DiCerbo et al., 2014; Wong-Fillmore & Snow, 2000). For example, reading teachers' training may support their knowledge of academic language features compared with teachers with other credentials, with knowledge of linguistics required by the Standards for Reading Professionals (International Reading Association Standards 2010 Committee, 2010).

Thus the present investigation addressed an existing gap in the literature by exploring teachers' knowledge of the linguistic facets of academic language across teachers with different types of training and amounts of professional development, to understand which teachers are thinking linguistically.

Motivational Differences Among Teachers

Teaching academic language requires not only knowledge and skills for instruction but the will to implement practices. To explore potential differences in teachers' motivation for teaching academic language, we focus on two constructs in the motivation literature that are highly correlated with teacher performance: teacher efficacy and task value. The motivational construct of *teacher self-efficacy* reflects perceived competence in imparting knowledge and influencing student behavior (Guskey & Passaro, 1994) and has been linked to teacher classroom behaviors (Shahid & Thompson, 2001). *Task value research*, another motivational construct, documents that a teacher's level of engagement in a task reflects overall perceptions of the value and importance of that task (Eccles et al., 1983; Wigfield & Eccles, 1992). Capturing teachers' motivations for targeted pedagogical practices and reform initiatives is essential given the multicomponential nature of instruction (e.g., attention to content, behavior, and student engagement).

Existing research substantiates potential differences in teacher motivation—both efficacy beliefs and task value—for academic language, as a function of the types of training they receive. First, in the case of efficacy beliefs, a large-scale survey with 5,300 California teachers demonstrated that teachers with bilingual credentials reported higher perceptions of their ability to teach and support learners' English language development than teachers without these credentials (Gándara, Maxwell-Jolly, & Driscoll, 2005). Youngs and Youngs (2001) found that mainstream teachers without specialized credentials reported lower levels of efficacy for teaching linguistically diverse students and were less likely to understand how students develop and learn language in content-area classrooms. These studies did not focus on teachers' knowledge of academic language in particular but showed that in the related and more broadly conceived area of language development, teachers trained to work with linguistically diverse students reported higher levels of teaching efficacy than their mainstream teacher peers.

Studies focused on these two motivation constructs—perceived efficacy and importance of language development—have rarely explored academic language specifically. In one of the few studies to look at academic language and mainstream teachers, Carter, Crowley, Townsend, and Barone (2016) found that 25 secondary content-area teachers attributed differences in their own academic language progress to their perceived efficacy in using academic language. In addition, as teachers' depth of knowledge about academic language grew, so did their value of its importance for learning, with teachers increasingly seeing academic language as interdisciplinary and thus relevant and instrumental for all content areas. Nonetheless, this study used only a small sample of teachers and examined this construct descriptively without capturing how motivations differed across teachers. Building on this study and extending it to teachers across the profession, the present study captured the knowledge and motivation for academic language across teachers with varying levels of training or professional development that might explain teachers' skill and will to incorporate academic language into practice.

Teacher Interpretations of Academic Language

In addition to examining teachers' knowledge and motivation, this study set out to capture how teachers conceptualize and define academic language to understand patterns of interpretation among teachers across the profession. Educators' working definitions of this term and what they consider its salient features influence instructional decision-making around how academic language should be both taught and assessed (Bailey, 2010). Yet, there is a dearth of research on how teachers are taking up existing definitions in authentic, school-based contexts (Valdés, 2004). To this end, this mixed-method study included a qualitative component to capture and describe teachers' potentially diverse definitions of academic language.

A large body of scholarly research has evaluated varying definitions of aca-

demic language (Bailey, 2010; García, 2009; Gibbons, 1998; Hornberger & Link, 2012; Scarcella, 2003). Current understandings of this term have moved away from unidimensional conceptions, such as seeing academic language as simply the language of school or knowledge of words associated with specific disciplines (Gee, 2004). Instead, scholars and educational standards adopt a more multifaceted or multicomponential definition that includes use of vocabulary, grammar, and discourse associated with the disciplines and thus involves not solely language components but also access to higher order thinking or understanding of more abstract concepts in the disciplines (Uccelli et al., 2015; Zwiers, 2008).

Some scholars have argued that despite changes toward more comprehensive and multifaceted understandings of academic language, teachers may interpret this term in ways detrimental to students' learning (Flores, 2015). Specifically, teachers may consciously or unconsciously view students differently based on academic language proficiency, seeing academic language as an inherent attribute of some students and a deficit in others. Such interpretations may prevent teachers from acting linguistically to support all students, as they position some students' linguistic abilities as deficits rather than considering potential problems with the instruction (Delpit, 1988). Gee (2004) argued that teachers tend to take a traditionalist approach to instruction and see schools as tasked with teaching component skills (e.g., vocabulary), as opposed to embracing instruction as a cultural process where students are apprenticed in the ways of thinking, acting, and using language like disciplinary experts. Gee argued that present understandings of academic language place some students, particularly those from lower socioeconomic backgrounds or minority students, at a disadvantage. In particular, he asserted,

> many schools are barely aware they [academic language varieties] exist, that they have to be learned, and that the acquisition process must start early. At best, they believe you can teach children to think (e.g. about science or mathematics) without worrying too much about the tools children do or do not have with which to do that thinking. Indeed, schools create more alienation over academic varieties of language and thinking than they do understanding. (p. 3)

Of interest was whether teachers' definitions of academic language across the profession might reveal patterns of interpretation that demonstrate such deficit perspectives.

To date, few studies have explored teachers' definitions of academic language across the profession or with attention to deficit perspectives that may negatively influence students' learning (Flores, 2015; Valdés, 2004). Bailey (2010) examined definitions of this term generated by teacher educators who instruct or supervise teachers of ELs, generating comprehensive, practice-based definitions of academic language, however, her study did not consider how educators may position students in their understanding of this term. As such, we aimed to build on and extend this study by capturing definitions of *all* teachers across K–12 classrooms and paying attention to both linguistic facets of their definitions and conceptualizations that

might engage deficit perspectives and issues of power and difference.

In this way, we set out to explore teachers' (a) knowledge of the linguistic forms of academic language, (b) motivations for incorporating academic language instruction, and (c) interpretations of this term, with particular attention to how teachers with different types of training might be distinctive across these domains. More specifically, this investigation set out to answer the following research questions: Do teachers with different training have divergent levels of motivation and knowledge of the linguistic forms of academic language? How do teachers define academic language, and do these interpretations differ as a function of the types of teacher training they have received? Answers to these questions will inform how this term is taken up and used by a range of practicing teachers, which is essential for addressing misperceptions and supporting professional development.

Method

Teachers in the present study were part of a university–school partnership in a midwestern city. This partnership included 25,000 students attending elementary, middle, and high schools, with 92% of the students in these schools receiving free and reduced-price lunch, 66% Latino, 15% Black, 8% Asian, 2% multiracial, and 9% White, with 31% labeled as ELs.

This study focused on a subsample of the larger population, including 322 teachers across 22 schools. Twenty-two school principals disseminated an electronic survey to capture teachers' motivations, knowledge, and definitions of academic language. Based on demographic data collected as part of the survey, 83% of participating teachers were female, 53% taught in the elementary grades, 47% taught middle or high school, and on average, participants reported 13 years of teaching experience, with 85% of the sample having more than 5 years of experience. Teachers had varied instructional expertise: reading endorsements (N = 59), bilingual endorsements (N = 63), ESL endorsements (N = 143), and learning behavior specialist (LBS) endorsements (N = 81).[1] Eighty-three teachers were mainstream teachers who did not select any additional endorsements. Beyond formal schooling, teachers on average had attended five professional development workshops on academic language across their careers.

Procedures and Measures

The survey was administered at the end of the 2015–2016 school year. In addition to capturing information about teachers' training, the survey contained sections focused on teachers' motivations and knowledge of academic language.

Academic Language Teaching Efficacy Scale. Questions addressing teachers' academic language teaching efficacy were drawn from the Teaching Efficacy Scale by Gibson and Dembo (1984). Original items were amended to address academic

language specifically, similar to previous studies that used amended items for capturing teaching efficacy in literacy (Cantrell & Callaway, 2008; Graham, Harris, Fink-Chorzempa, & MacArthur, 2003). This measure is composed of two subscales, Personal Teaching Efficacy (PTE) and General Teaching Efficacy (GTE). The former addresses teachers' beliefs that they have the skills and abilities to support student learning of the target content (i.e., academic language), or a teacher's perceived competence in pedagogical effectiveness. The latter addresses teachers' beliefs that teaching beyond other environmental factors (e.g., home environment) can impact student learning in the target area. The Personal Teaching Efficacy subscale includes items such as "If a student masters new academic language quickly, this is because I knew the necessary steps in teaching academic language." The General Teaching Efficacy subscale includes items such as "The amount of academic language a student can learn is primarily related to family background." This measure uses a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*) across all 16 items. Both the PTE and GTE subscales demonstrated acceptable reliability (α = .80 and α = .75, respectively).

Importance of Academic Language subscale. Grounded in work by Eccles et al. (1983) on task values and amending items from Wigfield and Guthrie's (1997) importance subscale, three survey items addressed whether teachers perceived academic language to be important to learning (e.g., "It is very important to me to use high quality academic language in my classroom"). These items were assessed using a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). These items demonstrated acceptable reliability (α = .84).

Academic language definitions. The survey also captured teachers' definitions of academic language with the prompt "What is academic language? Define what you think this term means." Teachers provided definitions in open-ended response boxes. In the present study, we explored these definitions by first coding each response using a numeric scale, evaluating these definitions for teachers' level of knowledge of the linguistic features (i.e., vocabulary, syntax, and discourse) of this term. We then explored definitions using an iterative process of content analysis to categorize patterns in the responses.

Linguistic knowledge. While precise definitions are still elusive, scholars and practitioners that specialize in academic language agree on linguistic facets of academic language, that is, the distinctive vocabulary, syntax, and discourse of the disciplines (Nagy & Townsend, 2012; SCALE, 2018; Uccelli et al., 2015; Valdés, 2004). Based on these facets, we coded definitions on a scale from 0 to 2. Definitions that received a 0 were those that provided an unrelated responses (e.g., "Academic language is being able to learn thru a wide variety of skills"). Those that received a 1 were definitions that addressed some aspect of the linguistic features of academic language (e.g., "Academic language is vocabulary associated with

academic subjects"). Definitions that received a 2 included a more comprehensive definition with several linguistic facets and alluded to disciplinary thinking (e.g., "Academic language is content-based words, sentence and discourse demands that will help students understand the content in a deeper way"). All definitions were coded twice by two coders with a Cohen's kappa of .56, a moderate level of reliability. All discrepancies were discussed and resolved by consensus.

Perceptions and interpretations. To thematically code these definitions, we used an iterative process to create a definition codebook (Neuendorf, 2002). We individually reviewed definitions using a codebook based on existing research on academic language (Bailey, 2007; Flores, 2015; Zwiers, 2008) and then met to discuss repeating patterns and revise the codebook (Polikoff, 2015). The final codebook included the following codes: power and privilege, social language, prerequisite to learning, specific to ELs, complex language tied to learning, language of school, vocabulary, and written artifacts. We applied these codes to every definition, with some definitions receiving more than one code. Two coders independently coded all the definitions with acceptable levels of reliability: complex language tied to learning $\alpha = .87$, issues of power and privilege $\alpha = .94$, distinct from social language $\alpha = .94$, prerequisite to learning $\alpha = .94$, specific to the learning of ELs $\alpha = .97$, the language of school $\alpha = .73$, vocabulary $\alpha = .82$, and specific to written materials $\alpha = .90$.

Analysis

To address our first research question regarding whether teachers' level of motivation and knowledge for academic language was positively associated with certain types of teacher training, we used multiple regression. We conducted preliminary analyses to explore the intraclass correlation for each of our outcomes to assess how much variation in these outcomes was attributable to within- and between-school differences to determine if we should estimate models using multilevel modeling, nesting teachers within schools. However, less than 5% of the variability in the outcomes of interest were attributable to between-school differences, with the vast majority of variability residing within schools (knowledge ICC = 1%, importance ICC = 1%; teacher efficacy = 3%). Thus, to provide a more parsimonious set of models, we used multiple regression (Singer & Willett, 2003). Specifically, we used the PROC REG statement in SAS 9.3 to explore teacher-reported motivation and teacher knowledge of the linguistic features of academic language, accounting for individual differences in teachers' experience (i.e., years teaching and professional development) and expertise (e.g., endorsements for ELs).

For our second research question, regarding teacher understandings of academic language and how interpretations of this term may differ by whether teachers are specifically trained to think linguistically, we explored the prevalence of our codes. We used analytic writing to delineate emerging patterns in the discourse of these definitions. We analyzed the prevalence of these different definitions across

teachers with different endorsements to better understand whether certain teacher groups espoused certain understandings of this concept more than others.

Levels of Motivation and Knowledge Across Teachers

We first provide descriptive statistics that capture mean teacher motivations and knowledge about academic language, summarized in Table 1.

Across the sample, teachers demonstrated moderately high levels of PTE, with the average teacher reporting that he or she slightly agreed with statements such as "If one of my students struggled with academic language in an assignment, I would be able to accurately assess whether the language demands of the assignment were at the correct level of difficulty." By contrast, with regard to GTE, teachers tended to slightly disagree with items such as "The hours in my class have little influence on students' academic language compared to the influence of their home environment." Teachers' disagreement with these negatively worded items indicates that teachers on average had more positive feelings about the contribution of teaching to students' learning experiences beyond other factors. As for espoused beliefs about the value of academic language, teachers on average agreed with statements

Table 1
Means and Correlations Among Teacher Experience, Characteristics, Motivations, and Knowledge

	Total sample		ESL endorsed		Not ESL endorsed			Bilingual endorsed		Not bilingual endorsed		
	Mean	SD	Mean	SD	Mean	SD	Sig	Mean	SD	Mean	SD	Sig
PTE	4.05	0.56	4.53	0.53	4.50	0.58	ns	4.67	0.43	4.47	0.58	$p < 0.01$
GTE	3.08	0.73	3.00	0.71	3.15	0.74	$p < 0.07$	3.07	0.72	3.09	0.73	ns
Importance	5.25	0.69	5.38	0.69	5.14	0.68	$p < 0.01$	5.52	0.53	5.17	0.71	$p<0.0001$
Knowledge	0.90	0.54	0.95	0.53	0.86	0.55	ns	0.90	0.51	0.89	0.55	ns

	1	2	3	4	5	6	7	8	9
1. Reading	1								
2. ESL	−0.029	1							
3. Bilingual endorsement	−.149**	.367**	1						
4. Learning behavior	−.140*	−.206**	−.191**	1					
5. Knowledge	−0.020	.106	0.069	−0.055	1				
6. Importance	.169**	.167**	.199**	−.177**	0.068	1			
7. PTE	0.102	0.024	.142*	0.052	0.009	.469**	1		
8. GTE	−0.064	−0.103	−0.01	0.027	−.169**	−0.057	0.011	1	
9. PD	0.093	.190**	.248***	−0.153**	0.097~	.155**	.199**	−0.007	1

Note. Sig represents statistical significance. We used a t-test to compare means between the two groups, assuming that the variances for both populations were the same, using the pooled equal variances test. GTE = general teaching efficacy. PTE = personal teaching efficacy.

*p < .05. **p < .01. ***p < .001.

such as "It is very important to me to use high quality academic language in my classroom," indicating a positive value of academic language. On average, teachers did not report multifaceted understandings of academic language, with the average score across teachers being a .90; that is, teachers on average only addressed one facet of its many linguistic components.

In Table 1, we also disaggregate the data across different levels of teacher expertise, specifically by endorsement categories that are more likely to think linguistically (i.e., teachers who work with ELs). On average, bilingually endorsed teachers reported viewing academic language as more important than nonbilingually endorsed teachers (bilingually endorsed $M = 5.52$, $SD = .53$; not bilingually endorsed $M = 5.17$, $SD = .71$; $p < .0001$) and experienced higher levels of PTE (bilingually endorsed $M = 4.67$, $SD = .43$; not bilingually endorsed $M = 4.47$, $SD = .58$; $p < .01$). By contrast, ESL-endorsed teachers did not differ significantly in their levels of PTE from their peers who did not have ESL endorsements, but they did report viewing academic language as more important than their non–ESL endorsed peers (ESL endorsed $M = 5.38$, $SD = .69$; not ESL endorsed $M = 5.14$, $SD = .68$; $p < .01$). The mean importance score for ESL-endorsed teachers was still lower than it was for teachers who were bilingually endorsed. ESL teachers had lower levels of GTE, with these mean differences tending toward significance (ESL endorsed $M = 3.00$, $SD = .71$; not ESL endorsed $M = 3.15$, $SD = .74$; $p < .07$). This finding indicates that ESL teachers reported feeling that instruction was more impactful than other factors (i.e., home environment and student characteristics). Lastly, there were no statistically significant differences between groups on knowledge of the linguistic forms of academic language.

In Table 1, our results show a statistically significant association between importance of academic language and having an ESL ($r = .167$, $p > .01$), bilingual ($r = .199$, $p > .01$), or reading endorsement ($r = .169$, $p > .01$), with teachers who had one of these endorsements espousing higher levels of academic language importance. By contrast, there was a statistically significant negative relationship between importance of academic language and being a learning behavior specialist ($r = -.177$). PTE was positively and significantly correlated with having an ESL endorsement ($r = .142$, $p > .05$). As we might imagine, PTE and importance were positively correlated ($r = .469$, $p > .01$). Additionally, we found a negative statistically significant association between knowledge of academic language's linguistic forms and GTE.

Lastly, the frequency of attending academic language professional development was positively correlated with teachers' PTE, importance of academic language, and knowledge of the linguistic forms of academic language ($r = .199$, $p < .01$; $r = .155$, $p < .01$; $r = .097$, $p < .09$, respectively). Furthermore, having an ESL endorsement ($r = .190$, $p < .01$) or bilingual endorsement ($r = .248$, $p < .001$) was positively correlated with the number of professional development sessions attended on academic language; that is, teachers with these endorsements reported more frequent attendance

at these workshops. Teachers with learning behavior specialist endorsements attended fewer professional development workshops on academic language than those without this endorsement ($r = -.0153$, $p < .01$). Noteworthy is that the association between having a reading endorsement and frequency of attending professional development workshops also tended toward significance ($p < .10$).

An unexpected finding was the absence of a robust association between knowledge of linguistic forms and teachers with specialized endorsements. In our taxonomy of models, we explored whether this association might emerge when controlling for other teacher characteristics, such as years teaching, gender, and grade taught.

Regression Models

In this analysis, we used multiple regression, centering all continuous variables at their grand mean. This estimation technique allows one to fit multiple regression models by accounting for various control variables and covariates. For each outcome of interest (PTE, GTE, academic language importance, and knowledge of academic language), we estimated a series of models. Our model building began with stepwise integration of teacher characteristics that might explain the outcome of interest (grade, gender, years in the profession, professional development experiences), then our question predictors regarding endorsement categories were added into the model to explore which endorsements might explain the outcome of interest. The same basic equation represents the estimation of our final model for each outcome, which included an intercept and our four covariates, followed by the various endorsement categories and a residual term:

$$\mathrm{PTE} = \beta_0 + \beta_1 \mathrm{Grade} + \beta_2 \mathrm{Female} + \beta_3 \mathrm{Years} + \beta_4 \mathrm{PD} + \beta_5 \mathrm{Endorsement} + \varepsilon.$$

Table 2 provides the final models for our outcomes of interest.

First, Model A, our final regression model for teachers' PTE, indicates that when accounting for instructional grade, years of experience, and endorsements, teachers who attended more professional development workshops on academic language ($b = .03$, $SE = .01$, $p < .0001$), had a bilingual endorsement ($b = .23$, $SE = .10$, $p < .05$), or had a learning behavior specialist endorsement ($b = .18$, $SE = .08$, $p < .05$) had higher levels of PTE. Teaching endorsements explained 4% of the variance in PTE, with having a bilingual or learning behavior specialist endorsement associated with higher reports of PTE. To elaborate further on other training characteristics, each additional professional development workshop on academic language attended was associated with a .03 increase in PTE.

Model B shows that GTE was explained by gender ($b = -.31$, $SE = .13$, $p < .05$) and by whether or not a teacher had an ESL endorsement ($b = -.20$, $SE = .10$, $p < .05$) when accounting for grade, years teaching, professional development, and all other endorsement categories. More specifically, women were more likely to view instruction as being a means of improving students' academic language than

other variables, when compared to their male counterparts. Teachers with ESL endorsements had on average .20 points lower on GTE, again indicating positive perceptions of the ability of instruction to influence academic language above and beyond external or environmental variables.

Model C shows that having a bilingual endorsement ($b = .30$, $SE = .12$, $p < .01$) and a reading endorsement ($b = .34$, $SE = .11$, $p > .01$) was positively associated with teachers' value of academic language, with these teachers reporting .30 and .34 points higher, respectively, on the academic language importance scale when controlling for grade, gender, years teaching, professional development, and other endorsements. These variables in conjunction explained 13% of the variance in teachers' value of academic language.

Model D shows that teachers' linguistic knowledge of academic language was not explained by endorsement categories, with none of the endorsement categories being statistically significant in our final model. However, linguistic knowledge of academic language was explained by teachers' frequency of attending professional development workshops ($b = .02$, $SE = .01$, $p < .01$) and by gender ($b = .23$, $SE = .09$, $p < .01$), with women having higher levels of knowledge than their male peers when accounting for grade level and years of teaching.

These quantitative findings regarding the absence of a relationship between endorsements and knowledge of linguistic forms also furthered our interest in our qualitative results. Specifically, we examine the interpretations of this construct for

Table 2
Final Models Across Outcomes

	Personal teaching efficacy, Model A		General teaching efficacy, Model B		Academic language importance, Model C		Knowledge of academic language, Model D	
	B	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Intercept	4.43***	0.10	3.41***	0.13	5.08***	0.12	0.71***	0.09
Grade	−0.01	0.01	0.01	0.02	−0.023	0.02	−0.02	0.01
Female	0.03	0.10	−0.31*	0.13	0.08	0.11	0.23**	0.09
Years teaching	0.01*	0.00	−.005	0.006	−0.00	0.01	−0.004	0.004
PD	0.03***	0.01	0.003	0.01	0.02	0.01	0.02**	0.01
Bilingual	0.23*	0.10	0.06	0.13	0.30**	0.12	0.06	0.10
ESL	−0.09	0.08	−0.20*	0.10	0.05	0.09	0.03	0.07
Reading	0.14	0.09	−0.10	0.12	0.34**	0.11	−0.07	0.09
Behavior	0.18*	0.08	0.02	0.11	−0.13	0.10	0.015	0.08
R^2	0.12		0.06		0.13		0.08	
F	4.13		1.94		4.62		2.95	
P	0.00		0.05		0.0001		0.0003	

Note. GTE = general teaching efficacy. PD = number of professional development workshops on academic language attended over the course of one's career. PTE = personal teaching efficacy.

*$p < .05$. **$p < .01$. ***$p < .001$.

teachers who did not provide definitions that would be considered linguistically multifaceted to understand potential patterns of misinterpretation.

Interpretations of Academic Language

Based on our analysis of the qualitative codes, two overarching themes emerged from the data. The first overarching theme was that many teachers did not describe academic language as multifaceted but instead as composed of one linguistic form. Specifically, teachers referred to academic language solely as vocabulary, as the nondescript general language of school (i.e., a generic view of academic language as related to school), or as written language alone. The second theme that emerged was that teacher definitions positioned academic language as related to issues of power and difference, in particular that academic language was associated with power, established strict dichotomies with how students talk in social settings, and was positioned as a prerequisite of learning or as an area of weakness for ELs. We elaborate on these in greater depth.

Academic language as a unidimensional characteristic. A prevalent theme across teacher definitions of academic language were responses that, instead of viewing academic language as multifaceted and including multiple linguistic characteristics (i.e., vocabulary, syntax, and discourse) and modalities (i.e., reading, writing, speaking, and listening), positioned academic language as solely capturing one linguistic characteristic. Of teachers who defined academic language in this manner, many provided definitions that equated academic language with vocabulary alone, with responses such as "Academic vocabulary (language) is the set of words that we use in education to give specific directions (e.g. describe, compare, etc.)" or "Academic language is specific terminology that students acquire in content areas." While academic language does include vocabulary, it is not the sole component, with such responses indicating that teachers seemed to see these two as synonymous with 104 definitions of academic language composed solely of vocabulary.

The most prevalent definition, embraced by 110 teachers, was the conception of academic language as "the language of school." Teachers provided responses that indicated a more amorphous conceptualization of this concept with little detail on the linguistic nature of this concept beyond the general understanding of school-based usage, with definitions such as "Academic language is the language needed by students to do well in school." While this definition captures an aspect of this register, similar to the earlier described vocabulary definitions, it does not provide a multifaceted understanding of this concept.

Last, teachers defined academic language as being the language of written texts, with definitions such as "Academic language is language that is used in descriptions of instructions, for instance on tests or directions for work." This was the least common definition, used by 32 teachers in the sample.

Academic language as related to power and difference. The second theme that emerged included definitions that positioned academic language as upholding existing power structures and differences between groups of students. For example, 27 teachers provided definitions that focused on student deficits. These definitions positioned academic language as the privileged language and denigrated other linguistic registers. For example, one definition that fell in this category was "proper language for students to use in the functioning world." The use of the word "functioning" here positions those who do not use academic language as having a deficit—they are literally unable to function. Another teacher explained that "We teachers find it difficult to combat the language learner gap as well as the street slang language that is ever present in our high school community." This response not only situates academic language as the antidote for "street slang" but positions teachers as working against rather than with students to increase academic language, using the harsh language of "combat" to describe how these two groups approach each register. Teachers also contrasted academic language to students' native language, implying that students' home languages do not have an academic register: "This is the language that the students learn in, not their native language."

Within this theme, there were also teacher definitions that juxtaposed and dichotomized how students talk in social settings to academic language. For example, many teachers defined academic language as different "than casual conversation language" or dissimilar "from everyday language or social language, which the students might use at home, on the playground, in social situations with their friends, etc." These definitions promote a strict dichotomy between school and home contexts as well as academic versus social situations. Creating such a dichotomy likely reifies negative understandings of students who may adopt more informal ways of speaking in their interactions with peers and teachers. In our sample, 32 teachers provided definitions that maintained this dichotomy between social and academic settings.

An additional type of definition within this theme was that which positioned academic language as a prerequisite for learning, positing that students could not understand or learn content unless they could use academic language. An example of these types of definitions included "language necessary to allow learning." These definitions, provided by 22 teachers, in framing academic language as a perquisite of learning, set up a situation in which students who do not have proficiency in this register are viewed as less knowledgeable about content or positioned as less capable to engage in learning.

A final type of definition that emerged as part of this theme on power and difference was that which positioned academic language as an area of weakness for ELs. Only 12 teachers espoused definitions that strictly focused on academic language for ELs. These teachers provided definitions that specifically flagged academic language as an area in which ELs struggled: "For many of the ELs and dual-language learners in my classroom, this academic language is too high for them, therefore texts must be chosen which would best accommodate their com-

prehension in the classroom." Such definitions focused on academic language as a challenge for ELs, not as an area for potential growth and empowerment per se.

When we look at the prevalence of these different types of definitions across endorsement categories, it becomes apparent that teachers of all endorsement categories held these varied interpretations. Noteworthy is that the most prevalent categories across all endorsements and even those without endorsements were interpreting academic language as either synonymous with vocabulary or as the generic concept of the language of school. It is also worth noting that of the ESL-, bilingual-, and reading-endorsed teachers, many did provide definitions of academic language that addressed its multifaceted linguistic nature (i.e., 24%, 22%, and 20%, respectively), while only 10% of those with a learning behavior specialist endorsement provided these more linguistically complex definitions. As such, teachers who received more intensive language instruction in their teacher training may be more conscious or aware of the more complex linguistic features of this concept, but many across categories still made meaning of this concept in ways that may further differences between students and reify dynamics in the classroom around power and privilege.

Discussion

Our findings contribute to the existing literature in several important ways. First, this study showed a complex relationship between teacher endorsements and knowledge of academic language, as well as motivation to instruct on this important feature of school learning. While teachers with endorsements with linguistic foci did exhibit higher levels of motivation for academic language, that is, higher perceived teaching efficacy, and considered academic language to be of central importance, we did not find commensurately high levels of knowledge of the features of academic language. These results contribute to the literature by capturing a larger portion of the teaching profession than previously has been explored and documenting the knowledge and motivational variability across endorsement categories in expected and unexpected ways. Second, this study contributes to the existing scholarship on teacher conceptualizations of academic language by capturing a diversity of patterns of interpretation for the definition of this construct and, more specifically, how interpretations that included deficit perspectives persisted even across teachers specifically trained to serve linguistic minority students. We elaborate on these findings in the remainder of this section.

Motivational Trends

This study found that teachers with endorsements focused on language development—specifically ESL, bilingual, and reading—had higher levels of motivation for academic language than their peers without such endorsements. Specifically,

bilingual-endorsed teachers reported feeling more efficacious in implementing academic language and reported valuing academic language instruction more than their peers. This finding is consistent with previous research that documented bilingual teachers' increased competence and positive perspective on language learning as essential for students' academic trajectories (Gándara et al., 2005; Hopkins, 2013). Similarly, ESL-endorsed teachers were more likely than non-ESL-endorsed peers to be optimistic about the role of teachers in students' learning and to disagree that "environmental factors overwhelm any power that teachers can exert in school" to support students' academic language (Tschannen-Moran, Hoy, & Hoy, 1998, p. 204).

ESL-endorsed teachers, like their bilingual counterparts, also demonstrated high levels of valuing academic language. However, once we accounted for differences in teachers' experience in the classroom (i.e., years teaching and frequency of attending professional development) and individual characteristics (i.e., gender), only bilingual and reading endorsements explained differences in teachers' perceptions of the importance of academic language. The finding that teachers with bilingual and reading endorsements rated academic language as more important is aligned with teacher education scholarship indicating that reading and bilingual preparatory programs dedicate more time than other programs to discussing language development and documenting its role in content knowledge (Hornberger, 2003; ILA, 2010). Thus the absence of a significant relationship between importance of academic language and being ESL endorsed, once other experience characteristics are accounted for, may reflect the wide array of approaches to ESL teacher training (Collier, 1985). For example, whereas bilingual-focused programs enroll bilingual and biliterate individuals and probe the interconnections between two or more languages in disciplinary classroom learning, ESL-focused programs often enroll monolingual individuals and emphasize strategies for English language development, possibly separate from content-area learning (Collier, 1985). The distinction lies in that the primary programmatic focus on English may not fully address the idea that language learning is about understanding different registers, an idea that is cross-linguistic and not solely about proficiency in a second language (García, 2009; Guerrero, 1997).

Another explanation for these differences in teachers' perceived value of academic language may reflect ESL teachers' expectations for students and corresponding instructional priorities. To elaborate, as a function of their training and classroom context, ESL teachers may see students' language learning as incremental. They may perceive students as having basic understandings of English, thus situating academic language instruction as a notable goal but one that follows subsequent to basic English skills. By contrast, reading teachers help learners to extract and construct meaning from curricular texts (RAND Reading Study Group, 2002), and bilingual teachers facilitate students' learning in the content areas via different linguistic mediums (Baker, 2011). In this way, teachers using reading and bilingual endorsements in the context of contemporary schools must use language

as a medium for learning, rather than language as a prerequisite to learning, which has often been the underlying assumption of traditional ESL programming (Collier & Thomas, 2004). As such, academic language may be highly valued by teachers who recognize its centrality to daily teaching for students to access curricular texts and disciplinary concepts.

An unexpected finding in the present investigation was when accounting for other endorsement categories, teacher characteristics, and professional development opportunities, an LBS endorsement was also positively associated with teachers' perceived personal efficacy in academic language. One potential explanation for this finding is that these high levels of teaching efficacy reflect a regular focus on Universal Design for Learning (UDL) in special education preparatory programs. UDL aims to make instruction accessible to all learners by using different modes to convey information, including multiple means of representation, action and expression, and engagement (Meyer, Rose, & Gordon, 2014). Specifically highlighting language as a central component, UDL "can more effectively accommodate students who learn differently, engage with content from different perspectives, and speak English at varied levels of proficiency" (Courey, Tappe, Siker, & LePage, 2012, p. 7). As such, these teachers may have felt prepared to teach students with a range of academic language skills based on this aspect of their training. Another potential explanation is that behaviorist theories underlie the curricula of LBS endorsement programs, prompting teachers to embrace active roles in influencing all facets of students' learning and behavior and to seek their own instructional mastery (Skinner, 1974).

Academic Language Knowledge and Conceptualizations

The present study found no statistically significant differences among teachers with diverse endorsements and their knowledge of the linguistic features of academic language. Knowledge of the more multifaceted nature of academic language, while not associated with the type of endorsement, was associated with teachers' frequency of attending academic language professional development. That is, frequency of attending professional development was the only teaching experience variable associated with teacher knowledge of the linguistic forms of academic language. This finding is consistent with work by Téllez and Waxman (2006) that supports the importance of professional development beyond preparatory programs to support teachers' expertise. Research has documented that effective professional development is recurrent (Darling-Hammond, Wei, Andree, Richarson, & Orphanos, 2009) and focused on a targeted area for learning (Kennedy, 2016). The positive association between frequency of academic language professional development and multifaceted understandings of academic language has direct implications for practice. That is, it provides supporting evidence for the potential of continuous professional development opportunities for building teachers' knowledge of this complex concept.

Relatedly, we found that teachers with limited knowledge of the diverse linguistic forms of academic language provided definitions that likely would not support instruction, conceptualizing academic language as (a) synonymous with vocabulary, (b) a broad and thus amorphous type of language used in school, and (c) about difference and deficits. This finding is aligned with work by Gee (2004) that posited that teachers do not recognize that to support academic language, they must apprentice students in how to think and make meaning in the disciplines. Aspects of academic language that are highlighted in these definitions can likely be traced to preliminary knowledge about this concept that may have been overextended or underexplored. To elaborate, teachers with a unidimensional definition of this concept identified only one facet of academic language. As an example of how this unidimensional interpretation might have developed, teachers may have learned about all-purpose Tier 2 and content-specific Tier 3 words or read standards in their discipline that refer to the language of school (Beck & McKeown, 2004) and thus have successfully integrated this one aspect of academic language into their existing schema for this concept. These interpretations provide fruitful space for continuous, targeted professional development that helps debunk potential misunderstandings and extend basic knowledge, such as supporting teachers in seeing how vocabulary is one facet of academic language among many, or provide details to flesh out how language manifests in different academic tasks.

In the same vein, teachers associating academic language with deficits and difference may have based these perceptions on incomplete information about this concept, including those who established strict dichotomies about language use in different settings or described academic language as an area of weakness for ELs. For example, teachers who juxtaposed academic language with students' home language or slang may have taken to an extreme a prevalent understanding in the EL literature, particularly work by Cummins (1980) on academic language and social language. While this strict dichotomy has been debunked in the literature (e.g., Cummins, 2000; Genesee, 1984), in many cases, scaffolding teachers' developing understandings of this concept may begin with a strict dichotomy as opposed to a more nuanced understanding of a linguistic continuum. The difficulty is when not enough time is dedicated to this concept and these initial understandings become fossilized as opposed to expanded.

Essential is that professional development assess and address these interpretations, especially those that encourage deficit perspectives for students who may not yet be as comfortable or adept at academic language (Flores, 2015). As such, we believe that "thinking linguistically" (Bailey, 2010, p. 608) must go hand and hand with "thinking ecologically" in teacher training. That is, teachers must recognize that all students engage in learning across a variety of spaces that involve different languages and registers both inside and out of school, and that individual students draw from these different languages and registers in unique, authentic, and utilitarian ways for distinct goals (Cummins, 2000; García, 2009; Hornberger, 2003).

Teachers should be encouraged to see their active roles in supporting students' linguistic knowledge of different registers so that students can feel empowered to fluidly use each to more comprehensively learn across settings (Gee, 2004).

It is worth noting that definitions that emerged in this study provide an understanding of what teachers find particularly salient about academic language. That is, underlying all teacher definitions was some basic understanding of this concept as related to language in academic settings. We see teachers' definitions less as capturing their total understanding and instead as providing insight into what different teachers see as the core of academic language. These definitions shed light on how teachers view and apply this construct in classrooms and everyday life. We would encourage future work to explore the ways teachers take up academic language in their instructional routines and activity selection. Future studies should also conduct interviews with teachers to probe why certain aspects of academic language—including the themes that emerged in the present investigation—may resonate or take on new meaning in local contexts.

Implications

Academic language plays an integral role in students' learning and achievement in today's schools (Uccelli et al., 2015). Nonetheless, as the present study demonstrated, the concept and term *academic language* is not consistently valued, utilized, or understood by the practitioners charged with supporting its use in classrooms. This study has supported varying levels of efficacy, importance, and understandings of academic language across practitioners with diverse preparation, including different teaching endorsements and diverse amounts of professional development. Findings hold implications for various educational stakeholders who seek to better prepare, place, and equip efficacious and expert teachers who regularly promote students' academic language development. Those involved with teacher training, including policy makers, teacher educators, administrators, and professional development providers, should critically consider how policy initiatives, teacher education programs, and professional development offerings approach academic language and should assess and reassess practitioners' developing understanding of this complex concept to tailor subsequent professional development. Indeed, most teachers in the present study did have some developing understanding of this concept, but in many cases, their partial knowledge led to extrapolations or misapplications. Given the complexity of this concept, it is essential that educational stakeholders work to provide meaningful learning opportunities for educators to build understandings and deconstruct misunderstandings of academic language, supporting teachers to think linguistically and ecologically and, by extension, act linguistically in ways that support all learners.

Note

[1] The LBS endorsement trains teachers to support students with exceptionalities. This endorsement addresses knowledge of multiple and unique needs of students with learning, behavioral/emotional, mental, and physical disabilities at elementary, middle, and high-school levels.

References

Bailey, A. L. (2007). *The language demands of school*. New Haven, CT: Yale University Press.

Bailey, A. L. (2010). Implications for assessment and instruction. In M. Shatz & L. Wilkinson (Eds.), *The education of English language learners: Research to practice* (pp. 222-247). New York, NY: Guilford Press.

Bailey, A. L., & Heritage, M. (Eds.). (2008). *Formative assessment for literacy, Grades K–6: Building reading and academic language skills across the curriculum*. Thousand Oaks, CA: Corwin Press.

Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Tonawanda, NY: Multilingual Matters.

Beck, I. L., & McKeown, M. G. (2004). *Text talk*. New York, NY: Scholastic.

Bunch, G. C. (2013). Pedagogical language knowledge: Preparing mainstream teachers for English learners in the new standards era. *Review of Research in Education*, *37*, 298–341. https://doi.org/10.3102/0091732X12461772

Cantrell, S. C., & Callaway, P. (2008). High and low implementers of content literacy instruction: Portraits of teacher efficacy. *Teaching and Teacher Education, 24*, 1739–1750. https://doi.org/10.1016/j.tate.2008.02.020

Carter, H., Crowley, K., Townsend, D., & Barone, D. (2016). Secondary teachers' reflections from a year of professional learning related to academic language. *Journal of Adolescent and Adult Literacy, 60*, 325–34. https://doi.org/10.1002/jaal.554

Collier, V. P. (1985, July). *University models for ESL and bilingual teacher training*. Paper presented at the conference Issues in English Language Development for Minority Language Education, Arlington, VA.

Collier, V. P., & Thomas, W. P. (2004). The astounding effectiveness of dual language education for all. *NABE Journal of Research and Practice*, *2*(1), 1–20.

Courey, S. J., Tappe, P., Siker, J., & LePage, P. (2012). Improved lesson planning with universal design for learning. *Teacher Education and Special Education*, *36*, 7–27. https://doi.org/10.1177/0888406412446178

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly*, *14*, 175–187. https://doi.org/10.2307/3586312

Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the cross-fire.* Clevedon, England: Multilingual Matters. https://doi.org/10.21832/9781853596773

Darling-Hammond, L., Wei, R., Andree, A., Richarson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX: National Staff Development Council.

Delpit, L. (1988). The silenced dialogue: Power and pedagogy in educating other people's

children. *Harvard Educational Review*, *58*, 280–299. https://doi.org/10.17763/haer.58.3.c43481778r528qw4

DiCerbo, P. A., Anstrom, K. A., Baker, L. L., & Rivera, C. (2014). A review of the literature on teaching academic English to English language learners. *Review of Education Research, 84*, 446–482. https://doi.org/10.3102/0034654314532695

Eccles, J. S., Adler, T. E., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J., & Midgley, C. (1983). Expectancies, values and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75–146). San Francisco, CA: Freeman.

Flores, N. (2015, October 1). *Is it time for a moratorium on academic language*? [Web log post]. Retrieved from https://educationallinguist.wordpress.com/2015/10/01/is-it-time-for-a-moratorium-on-academic-language/

Gándara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English language learners: A survey of California teachers' challenges, experiences, and professional development needs*. Retrieved from ERIC database. (ED491701)

García, O. (2009). *Bilingual education in the 21st century: A global perspective*. Malden, MA: Blackwell.

Gee, J. P. (2004). *Situated language and learning: A critique of traditional schooling*. New York, NY: Routledge.

Genesee, F. (1984). On Cummins' theoretical framework. In C. Rivera (Ed.), *Language proficiency and academic achievement* (pp. 20–27). Clevedon, UK: Multilingual Matters.

Gibbons, P. (1998). Classroom talk and the learning of new registers in a second language. *Language and Education*, *12*(2), 99–118. https://doi.org/10.1080/09500789808666742

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*, 569–582. https://doi.org/10.1037/0022-0663.76.4.569

Graham, S., Harris, K. R., Fink-Chorzempa, B., & MacArthur, C. (2003). Primary grade teachers' instructional adaptations for struggling writers: A national survey. *Journal of Education Psychology*, *95*, 279–292. https://doi.org/10.1037/0022-0663.95.2.279

Guerrero, M. D. (1997). Spanish academic language proficiency: The case of bilingual education teachers in the US. *Bilingual Research Journal, 21*(1), 65–84. https://doi.org/10.1080/15235882.1997.10815602

Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, *31*, 627–643. https://doi.org/10.3102/00028312031003627

Heineke, A. J., Papola-Ellis, A., Davin, K. J., Cohen, S., Roudebush, A., Wright-Costello, B., & Fendt, C. (2018). Language matters: Developing educators' expertise for English learners in linguistically diverse communities. *Language, Culture, and Curriculum*, *32*, 63–77. https://doi.org/10.1080/07908318.2018.1493493

Hopkins, M. (2013). Building on our teaching assets: The unique pedagogical contributions of bilingual educators. *Bilingual Research Journal*, *36*, 350–370. https://doi.org/10.1080/15235882.2013.845116

Hornberger, N. (Ed.). (2003). *Continua of biliteracy: An ecological framework for educational policy, research, and practice in multilingual settings*. Clevedon, UK: Multilingual Matters. https://doi.org/10.21832/9781853596568

Hornberger, N. H., & Link, H. (2012). Translanguaging and transnational literacies in multilingual classrooms: A biliteracy lens. *International Journal of Bilingual Education and Bilingualism, 15*, 261–278. https://doi.org/10.1080/13670050.2012.658016

International Reading Association Standards 2010 Committee. (2010). *Standards for reading professionals*. Newark, DE: International Literacy Association (ILA).

Kennedy, M. (2016). How does professional development improve teaching? *Review of Educational Research*, *86*, 1–36. https://doi.org/10.3102/0034654315626800

Lucas, T., Villegas, A. M., & González-Freedson, M. (2008). Linguistically responsive teacher education: Preparing classroom teachers to teach English language learners. *Journal of Teacher Education*, *59*, 361–373. https://doi.org/10.1177/0022487108322110

Meyer, A., Rose, D. H., & Gordon, D. (2014). *Universal design for learning: Theory and practice*. Wakefield, MA: CAST.

Nagy, W., & Townsend, D. (2012). Words as tools: Learning academic vocabulary as language acquisition. *Reading Research Quarterly, 47*, 91–108. https://doi.org/10.1002/RRQ.011

National Assessment of Educational Progress. (2017). *The nation's report card: 2017 mathematics and reading assessments*. Retrieved from https://www.nationsreportcard.gov/about.aspx

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common core state standards*. Washington, DC: Authors.

Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage.

Neugebauer, S. R., Coyne, M., McCoach, B., & Ware, S. (2017). Teaching beyond the intervention: The contribution of teacher language extensions to vocabulary learning in urban kindergarten classrooms. *Reading and Writing, 30*, 543–567. https://doi.org/10.1007/s11145-016-9689-x

Pence, K. L., Justice, L. M., & Wiggins, A. K. (2008). Preschool teachers' fidelity in implementing a comprehensive language-rich curriculum. *Language, Speech, and Hearing Services in Schools*, *39*, 329–341. https://doi.org/10.1044/0161-1461(2008/031)

Polikoff, M. S. (2015). Does the test matter: Evaluating teachers when tests differ in their sensitivity to instruction. In T. J. Kane, K. A. Kerr, & R. C. Pianta (Eds.), *Designing teacher evaluation systems: New guidance from the Measures of Effective Teaching project* (pp. 278–302). Hoboken, NJ: John Wiley.

RAND Reading Study Group. (2002). *Reading for understanding: Toward a research and development program in reading comprehension*. Santa Monica, CA: Office of Education Research and Improvement.

Scarcella, R. (2003). *Academic English: A conceptual framework* (Technical Report No. 2003-1). *Berkeley, CA: University of California Linguistic Minority Research Institute*. Retrieved from https://escholarship.org/uc/item/6pd082d4

Shahid, J., & Thompson, D. (2001, April). *Teacher efficacy: A research synthesis*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. New York, NY: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195152968.001.0001

Skinner, B. F. (1974). *About behaviorism*. New York, NY: Alfred A. Knopf.

Snyder, T. D., de Brey, C., & Dillow, S. A. (2018). *Digest of education statistics 2016* (Report No. 2017-094). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Stanford Center for Assessment, Learning, and Equity. (2018). *edTPA: Making good choices*. Retrieved from https://www.edtpa.com/Content/Docs/edTPAMGC.pdf

Téllez, K., & Waxman, H. C. (Eds.). (2006). *Improving educator quality for English language learners*. Mahwah, NJ: Lawrence Erlbaum.

Toth, P. D., & Moranski, K. (2018). Why haven't we solved instructed SLA? A sociocognitive account. *Foreign Language Annals, 51*(1), 73–89. https://doi.org/10.1111/flan.12322

Townsend, D., Filippini, A., Collins , P., & Biancarosa , G. (2012). Evidence for the importance of academic word knowledge for the academic achievement of diverse middle school students. *Elementary School Journal*, *112*, 497–519. https://doi.org/10.1086/663301

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*, 202–248. https://doi.org/10.3102/00346543068002202

Turkan, S., De Oliveira, L. C., Lee, O., & Phelps, G. (2014). Proposing a knowledge base for teaching academic content to English language learners: Disciplinary linguistic knowledge. *Teachers College Record, 116*, 1–30.

Uccelli, P., Phillips Galloway, E., Barr, C. D., Meneses, A., & Dobbs, C. L. (2015). Beyond vocabulary: Exploring cross-disciplinary academic-language proficiency and its association with reading comprehension. *Reading Research Quarterly, 50*, 337–356. https://doi.org/10.1002/rrq.104

Valdés, G. (2004). Between support and marginalization: The development of academic language in linguistic minority children. *International Journal of Bilingual Education and Bilingualism*, *7*, 102–132. https://doi.org/10.1080/13670050408667804

Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, *12*, 265–310. https://doi.org/10.1037/0022-0663.89.3.420

Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*, 420–432.

Wong-Fillmore, L., & Snow, C. (2000). *What teachers need to know about language.* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.

Youngs, C. S., & Youngs, G. A. (2001). Predictors of mainstream teachers' attitudes toward ESL students. *TESOL Quarterly*, *35*, 97–120. https://doi.org/10.2307/3587861

Zwiers, J. (2008). *Building academic language: Essential practices for content classrooms.* San Francisco, CA: Jossey-Bass.