The Development of Language Knowledge in a Teacher Education Program: Preparing Secondary Teacher Candidates to Identify and Teach Academic English in their Content Area Lessons

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Boston College

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THE DEVELOPMENT OF LANGUAGE KNOWLEDGE IN A
TEACHER EDUCATION PROGRAM:
PREPARING SECONDARY TEACHER CANDIDATES TO IDENTIFY AND TEACH
ACADEMIC ENGLISH IN THEIR CONTENT AREA LESSONS

Dissertation by

STEPHANIE GARRONE-SHUFRAN

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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ABSTRACT

THE DEVELOPMENT OF LANGUAGE KNOWLEDGE IN A TEACHER EDUCATION PROGRAM: PREPARING SECONDARY TEACHER CANDIDATES TO IDENTIFY AND TEACH ACADEMIC ENGLISH IN THEIR CONTENT AREA LESSONS

Stephanie Garrone-Shufran Dissertation Advisor: Maria Estela Brisk

This mixed methods research study examined the impact of an intervention designed to prepare mainstream secondary teacher candidates to identify and teach features of Academic English. The intervention was intended to develop Disciplinary Linguistic Knowledge (Turkan, deOliveira, Phelps, and Lee, 2014) through engagement in several tasks for preparing linguistically responsive teachers (Lucas and Villegas, 2013). Pre-tests, post-tests, and artifacts created by teacher candidates in their fieldwork placements, as well as observations of a small group of teacher candidates teaching in their placement classrooms and interviews with these participants, were collected in order to analyze the effect that the intervention had on the teacher candidates' identification of features of AE and their planning and implementation of instruction in these features. While the teacher candidates accurately identified features of AE on the post-tests and in the artifacts, only a small number of participants planned or implemented instruction in features of AE in their lessons. The experiences of the participants in the small group illustrated that teacher candidates need, in addition to the ability to identify features of Academic English, knowledge about how to teach these features, a commitment to teaching language in their lessons, and the support of supervisors and cooperating teachers who possess the same knowledge and commitment. The findings suggest that teacher education programs should engage both teacher candidates and the individuals

who guide the planning and teaching of lessons in their pre-practicum experiences in developing the essential knowledge of and commitment to teaching Academic English in mainstream content area classrooms.

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CHAPTER 1–THE GROWING DEMAND FOR TEACHERS WHO ARE PREPARED TO TEACH ACADEMIC ENGLISH TO STUDENTS OF THE "NEW MAINSTREAM"

It is through language that school subjects are taught and through language that students' understanding of concepts is displayed and evaluated in school contexts. In addition, knowledge about language itself is part of the content of schooling, as children are asked to adopt the word-, sentence-, and rhetorical-level conventions of writing, to define words, and in other ways to focus on language as language. In other words, the content, as well as the medium, of schooling is, to a large extent, language. Schooling is primarily a linguistic process, and language serves as an often unconscious means of evaluating and differentiating students. (Schleppegrell, 2004, p. 1-2)

Upon entering school, children are exposed to ways of using language that are valued in the various contexts of schooling. In order to be successful, students must use the expected features of this register of language, referred to as Academic English (AE). Although AE might be unfamiliar to many students when they first attend school, Gibbons (2002) explained that native English speaking children find learning AE less challenging than their non-native English speaking peers do. "Children who are learning through the medium of their first language, and who come to school having already acquired the core grammar of this language and the ability to use it in a range of familiar social situations, have a head start in learning to use the academic registers of school" (p. 5). Exposure to AE outside of school seems to accelerate the process of learning AE, as students whose parents are fluent in AE tend to be more successful in school (Zacarian,

2013). For students whose first language is not English or whose exposure to AE outside of school is limited, learning AE may be a more challenging process.

Learners of AE, those students who have limited exposure to AE outside of school, make up much of what Enright (2011) referred to as the "New Mainstream" in American schools. Within this "New Mainstream" population are culturally and linguistically diverse (CLD) students, those who live in a home where a language other than English is spoken. In 2011, CLD students made up approximately 22% of the school-age population in the United States (Federal Interagency Forum on Child and Family Statistics, 2013). Of those CLD students, 5% lived in a "linguistically isolated household," a household in which either no adults were monolingual English speakers or no adults classified themselves as speaking English very well; these students may receive little to no exposure to English outside of school (Federal Interagency Forum on Child and Family Statistics, 2013). Although some CLD students are successful in school, this population has been found to be at higher risk for literacy struggles and school failure (August & Hakuta, 1997; August & Shanahan, 2006).

CLD students may enter school either proficient in their first language and English or proficient in their first language only. CLD students who do not demonstrate proficiency in English upon entry to school are classified as limited English proficient or English Language Learner (ELL) students. Those CLD students classified as ELLs may be reclassified as Formerly Limited English Proficient (FLEP) after some time in a program designed for language learners. Regardless of whether they are classified as ELL or not, CLD students may be learners of AE.

For learners of AE, the struggle to keep pace with peers who are fluent in AE grows more difficult as they enter the secondary grades, where AE becomes more integral to success in school and also more challenging to learn (Kieffer, Lesaux, & Snow, 2008). The progress of all CLD students is not systematically monitored, despite the fact that this population is at an "elevated educational risk" (Kieffer, Lesaux, & Snow, 2008, p. 59). Under current accountability standards, the standardized test scores of CLD students classified as ELLs are monitored. A glimpse at scores from standardized tests shows that there is a persistent achievement gap between ELL students and their native English speaking peers in secondary schools. Since 1998, when the National Center for Educational Statistics began collecting data on English language learners (ELLs), the gap between these students and non-ELL students on the NAEP reading tests has not changed measurably (National Center for Educational Statistics, 2014b). In 2009, ELL students in grade 8 scored 47 points below their non-ELL peers, and ELL students in grade 12 scored 50 points below non-ELL students (National Center for Educational Statistics, 2014b). ELLs also have less access to opportunities and lower educational attainment than non-ELL students. The 2009 high school transcript study found that ELL students earned fewer credits, both overall and in core academic courses, and had lower GPAs than non-ELLs (Nord et al., 2013). At the end of the 2000-2001 school year, 10% of ELLs in grades 7 to 12 in U.S. schools were retained (McKeon, 2005). The high school drop-out rate of ELLs is between 15% and 20% higher than those of non-ELLs (Artiles & Ortiz, 2002). These national statistics are cause for concern, as ELLs are the fastest growing student population in the United States. Their enrollment in public schools increased 105% from the 1990-1991 to the 2000-2001 school year; in that same

time period, total student enrollment increased only 12% (McKeon, 2005). In the 2010-2011 school year, ELLs made up 9.1% of the public school population (National Center for Education Statistics, 2014a).

The evidence suggests that even after CLD students have achieved English proficiency, gaps still exist between the educational attainment of these students and their peers from monolingual English households (Aguirre-Munoz & Amabisca, 2010). In California, the results of a standardized reading test administered showed that FLEP students in the 11th grade were reading at the 6th or 7th grade level (Rumberger & Gándara, 2004). As CLD students struggle to succeed in school, it seems likely that, as Zacarian (2013) suggested, there is reason to "reframe the achievement gap as being between students who carry academic language and students who are learning academic language" (p. 21). In other words, for CLD students, the achievement gap may be more aptly referred to as the AE gap.

Academic English is a complex construct that encompasses language functions and features that vary according to domain (listening, speaking, reading, or writing), grade level, content area, and context of use (Anstrom et al., 2010). For this reason, AE is often defined in terms of the purposes for which it is used. Chamot and O'Malley (1994) defined AE as "the language that is used by teachers and students for the purpose of acquiring new knowledge and skills" as well as "imparting new information, describing abstract ideas, and developing students' conceptual understanding" (p. 40). AE has also been defined as the patterns of language used to carry out a specific activity valued in a discipline, the language used to participate in school discourses, and the language that appears in the typical texts and discourse of the classroom (Anstrom et al., 2010).

AE can be described in terms of the language functions it is used to accomplish and the linguistic features typically used in these functions. Language functions, the purposes for which language is used, that are common to AE include "explaining, informing, justifying, comparing, describing, classifying, proving, debating, persuading, and evaluating" (Chamot & O'Malley, 1994, p. 40). The use of certain linguistic features is necessary to express these functions appropriately. Bailey (2007) provided brief explanations of some general lexical, grammatical, and discourse features of AE. Lexical features of AE are those that are related to the use of both specialized and general academic words and phrases. Grammatical and syntactic constructions that are used often in AE include conditionals, relative clauses, and passive voice. Discourse-level features are structural elements and devices that are expected of various text types in academic contexts, such as the citation of evidence. Although there are some general features of AE that cut across disciplines, each discipline studied in school values specific functions and features of AE used for oral and written communication.

Since CLD students, regardless of English proficiency level, often spend the majority of their day in mainstream classes, the responsibility for teaching the functions and features of AE to CLD students has shifted to mainstream teachers (Harklau, 1999; Gibbons, 2002). The inclusion of CLD students in mainstream content classes has increased in recent years as a reaction to the growing focus on accountability (Lucas & Villegas, 2013). The content coverage provided in mainstream classes is thought to improve CLD students' achievement on standardized tests (Aguirre-Munoz & Boscardin, 2008). However, the exposure that CLD students receive to AE through inclusion in

mainstream content classes is not an effective means by which to develop proficiency in AE (Mohan, 2001; Gibbons, 2002). As Gibbons (2002) explained,

[V]iewing language development as a process of learning to control an increasing range of registers suggests that while all children are predisposed in a biological sense to learn language, whether or not they actually do, how well they learn to control it, and the range of registers and purposes for which they are able to use it are a matter of the social contexts in which they find themselves. (p. 5)

Exposure to AE alone does not promote CLD students' acquisition of AE. In order to develop proficiency in AE, these students must receive instruction in the features of AE in the contexts in which these features are used, namely, content area classrooms.

Students must be taught the language functions and features that they need to use to make meaning in the various academic disciplines (Lucas, Villegas, & Freedson-Gonzalez, 2008).

Traditionally, mainstream teachers do not explicitly teach AE. This lack of instruction in AE disadvantages CLD students whose language experiences outside of school may not include exposure to AE. This phenomenon is what Macedo (1994) called "a pedagogy of entrapment", in which schools "require from these linguistic-minority students precisely the academic discourse skills and knowledge bases they do not teach" (Bartolome & Macedo, 1999, p. 228). Delpit (1995) explained that "the culture of power", which are the "codes and rules for participating in power" related to "linguistic forms, communicative strategies, and presentation of self," must be acquired to be successful in a society (p. 25). The easiest way for a member of society to do that is to be told the rules by someone within the culture. Delpit (1995), who recognized the effect of

not teaching these rules on speakers of African-American Vernacular English, suggested that teaching the codes and rules should be the responsibility of teachers who work with CLD students.

[S]tudents must be taught the codes needed to participate fully in the mainstream of American life, not by being forced to attend to hollow, inane, decontextualized subskills, but rather within the context of meaningful communicative endeavors; that they must be allowed the resource of the teacher's expert knowledge, while being helped to acknowledge their own expertness as well. (p. 45)

In order for CLD students to learn AE, their teachers must cultivate a focus on language in their classrooms and engage students in activities in which they are using AE to accomplish tasks. Classrooms in which students are made aware of the functions and features of AE and given opportunities to practice using them are contexts in which CLD students can develop proficiency in AE (Gibbons, 2002).

To ensure that a mainstream, content area classroom is an effective context in which CLD students can acquire AE, Aguirre-Munoz & Amabisca (2010) recommended that content exposure should also include "explicit instructional attention to the language structures that comprise subject matter, and by extension school-based tasks" (p. 264). Teaching the AE needed to accomplish academic tasks has been suggested as the best way to increase student achievement (Genesee, Lindholm-Leary, Saunders, & Christian, 2006). Gibbons (2002) advised that teachers should be prepared to integrate instruction in AE into their content area lessons, so that AE "is developed hand in hand with new curriculum knowledge" (p. 6). Teachers in all disciplines must provide access to the content and opportunities to demonstrate knowledge of that content while also designing

experiences that will help students to develop the AE valued in that discipline (Snow & Uccelli, 2009; Valdes, Bunch, Snow, & Lee, 2005).

Explicit instruction in the AE of an academic discipline can only be enacted by teachers who have the knowledge to identify and teach that language (Aguirre-Munoz & Amabisca, 2010). Since American schools no longer include an in-depth study of language in their curricula, teachers have most likely not studied AE and therefore do not have enough knowledge about the functions and features of AE to teach these to students (Wong Fillmore & Snow, 2000). Additionally, teachers do not recognize the challenges that AE poses and the role knowledge of AE plays in providing access to content. Teachers tend to come from middle-class, academically literate backgrounds and, for this reason, likely did not need explicit instruction in AE to be successful in school (Alger, 2007). Their own schooling experiences, in which AE was not a barrier to learning, have made the language and literacy demands of content area classrooms "invisible" to them (deJong & Harper, 2005). This perspective also influences their attitude toward teaching AE. Since the AE of the content area is "invisible" to them, they do not realize that accessing the content requires understanding how AE is used to create meaning. Since the medium by which students learn content and demonstrate their learning is AE, teachers must be able to identify and teach to students the features of AE necessary to make meaning in the discipline (Lucas, Villegas, & Freedson-Gonzalez, 2008).

Mainstream teachers need to develop the knowledge and skills necessary for identifying and teaching the features of AE in their disciplines. Teacher education programs seem to be an ideal location for mainstream teacher candidates (TCs) to begin gaining the necessary knowledge and skills. However, at this time, teacher education

programs are not equipped to provide all TCs with coursework and experiences to prepare them to effectively instruct CLD students (Lucas & Villegas, 2011). According to deJong and Harper (2005), teacher education programs currently operate under "the assumption that teaching ELLs is a matter of pedagogical adaptations that can easily be incorporated into a mainstream teacher's existing repertoire of instructional strategies for a diverse classroom" (p. 102). However, that approach is insufficient for preparing mainstream TCs to work with learners of AE, students who require the support of teachers who can identify and teach the features of AE present in the texts and tasks of the discipline. Instead, as Bunch (2013) suggests, "the knowledge and skill base for all teachers must be reconceptualized" to include language (p. 302).

Previous ways of describing the specialized knowledge required to teach the content of a discipline, such as Shulman's (1987) Pedagogical Content Knowledge and Ball, Thames, and Phelps's (2008) Content Knowledge for Teaching, made no specific reference to the knowledge about language necessary for teaching CLD students.

However, in recent years, two new conceptualizations of the knowledge base required for mainstream teachers to teach the AE of their discipline have been proposed. Bunch (2013) describes pedagogical language knowledge as "knowledge of language directly related to disciplinary teaching and learning and situated in the particular (and multiple) contexts in which teaching and learning take place" (p. 307). Disciplinary Linguistic Knowledge, as described by Turkan, deOliveira, Phelps, and Lee (2014), is the ability to identify linguistic features in the discourse of a discipline and to model the use of these features for students in order "to maximize ELLs' access to content understanding and participation in talking and writing the language of a particular discipline" (Turkan et al.,

2014, p. 9). In both conceptualizations, teachers must be able to engage in analysis of the language used in disciplinary texts and tasks in order to identify and teach to students those features which are essential to accessing the content.

In terms of specific recommendations for how to develop pedagogical language knowledge and Disciplinary Linguistic Knowledge in TCs in teacher education programs, there is still debate over "what knowledge about language mainstream teachers need in order to engage and support ELs in meeting the kinds of language and literacy demands associated with the new standards, and how teachers might best be prepared to develop this knowledge" (Bunch, 2013, p. 299). Although there have been multiple proposals regarding the essential knowledge and skills for preparing mainstream TCs to teach AE, when Bunch (2010) summarized the proposals of Wong Fillmore and Snow (2000), Valdes et al. (2005), and Lucas, Villegas, and Freedson Gonzalez (2008), he found a common theme.

[A]ll three argue for the importance of teachers' focusing on the specific language demands facing students in mainstream instruction and assessment, including the nature of the oral and written texts students are called upon to engage with and the importance of creating the conditions necessary for students to engage effectively with those texts. (p. 357)

There may currently be no agreed-upon set of language-related knowledge and skills that TCs need to develop in teacher educations programs. However, it is clear that the ultimate goal of any approach to preparing TCs to teach AE is to assist them in analyzing the AE found in their content area texts and classroom activities and designing instruction to support students' acquisition of AE.

In terms of how the knowledge and skills necessary for teaching AE might be presented, researchers have made a few general recommendations. First, in order to "normalize" the focus on teaching language and working with CLD students in teacher education programs, knowledge about AE must be presented to TCs as part of the required knowledge base of all teachers (Bunch, 2013). As Valdes at al. (2005) explained,

If teachers are to see language as a central concern of their teaching and not as an "add-on" requirement for dealing with "those students" outside the mainstream, the language education of teachers must be integrated throughout their teacher education and professional development experiences. (p. 161)

By integrating the teaching of AE into all of the coursework and field experiences that TCs complete during their time in the program, teacher education programs demonstrate that the teaching of AE is the responsibility of all teachers. In the same way, Valdes et al. (2005) proposed that AE must be taught within "the context of students' work on their area of specialization" (p. 167). Secondary content area teachers have been found to be resistant to the notion of teaching language because they view themselves as content area specialists (Alger, 2007; Hall, 2005). Presenting language as an integral part of teaching in all content areas may help TCs to view the AE used in their discipline as an essential part of the discipline. In addition, teaching the concept that language demands are discipline-specific may help TCs to see that learning content and learning language are inextricably linked (Schleppegrell, 2004).

The lack of consensus on what knowledge to present and how to present it may seem like a challenge for teacher education programs as they decide how they will

prepare TCs to teach the AE of their disciplines. On the other hand, this lack of consensus may be viewed in a positive light. Teacher educators and researchers now have the opportunity to engage in iterative cycles of design and evaluation of multiple, various approaches for preparing TCs to teach AE. The field would benefit greatly from detailed descriptions of approaches, along with evidence related to the outcomes of the approaches (Lucas & Grinberg, 2008).

In summary, to be successful in school, students must use the expected features of AE. CLD students, who may be learners of AE, need the support of teachers who have been adequately prepared to teach them the features of AE expected in school. For CLD students in middle and high schools, this need is especially great, as, in these grades, learners of AE fall further behind their peers who are fluent in AE. While there may be no consensus on how best to prepare TCs in teacher education programs to teach the AE of their discipline, it is imperative that faculty in these programs find ways to integrate the necessary knowledge and skills for teaching AE into the courses and experiences required of all TCs. As teacher educators and researchers design and implement innovative methods of providing the necessary knowledge and skills to TCs, these methods should be studied, described, and evaluated, so that findings can be shared and discussed across the field.

Purpose of the Study and Research Questions

The purpose of this study was to discover the impact that an intervention designed to provide knowledge about features of AE had on secondary TCs' ability to identify and teach features of AE. This intervention was implemented in a teacher education program which had demonstrated a commitment to preparing all TCs to teach AE. The program

had been awarded a federal grant to design, implement, and study various methods for preparing mainstream TCs to design and enact instruction which would improve the language learning of CLD students in mainstream classes. The intervention studied in this research was a training session which all secondary TCs attended in conjunction with their pre-practicum experiences in Fall 2014. In this training session, TCs were taught a process for identifying the word, sentence, and discourse level features of AE that students would need to use to complete activities in their content area lesson plans. TCs were taught how to write language objectives for the lessons that included the features they identified and to describe in the lesson plan how they would teach or model the use of the expected features of AE to students.

The proposed research questions are related to the effect the training had on TCs' ability: a.) to identify the features of AE; b.) to plan lessons that included instruction in those features; and c.) to implement that instruction. In a previous study, I collected data from TCs after they had attended a similar training, and, although the TCs were able to identify features of AE, they did not express the understanding that they should use these identifications to plan or implement explicit language instruction in their content area lessons. In this study, I wanted to discover both to what extent the training helped TCs to identify the features of AE and to what extent TCs applied what was taught in the training to their planning and teaching of content area lessons during their pre-practicum placements.

In the teacher program in which the research was conducted, TCs complete three pre-practicum fieldwork experiences before they complete their practicum. Another aim of this research was to determine if there were differences in the effects that the training

had on TCs who were completing their first, second, or third pre-practicum placement. The second research question set up a comparison of the data across the three groups of TCs in order to discover what the differences were in terms of outcomes among the TCs who had completed one, two, or three pre-practicum fieldwork experiences. The research questions posed in this study were:

- 1. What happens when secondary teacher candidates receive training in identifying and teaching academic English in content area lessons?
 - a. How does the training affect teacher candidates' ability to identify the features of academic English present in content area lessons?
 - b. How do teacher candidates incorporate what was taught in the training into their lesson plans during their fieldwork experience?
 - c. How does a subset of teacher candidates implement the lesson plans they create during their fieldwork experience?
- 2. How does the number of fieldwork experiences (one, two, or three) influence the effects of the training on the teacher candidates?
 - a. What differences can be found among the teacher candidates' ability to identify the features of academic English present in content area lessons during their first, second, and third fieldwork experiences?
 - b. What differences can be found among the teacher candidates' incorporation of what was taught in the training into their lesson plans during their first, second, and third fieldwork experiences?

c. What differences can be found among the subset of teacher candidates' implementations of these lesson plans during their first, second, and third fieldwork experiences?

Significance of the Study

Teacher education programs can no longer continue to marginalize the education of CLD students. As the CLD student population grows, so does the demand for teachers who are equipped with the knowledge and skills to teach the features of AE that these students need to use and understand in school. In order to meet this growing demand, teacher education programs must begin to implement methods for providing the necessary knowledge and skills to all teacher candidates. Up to this point, there has been limited research conducted with mainstream TCs in teacher education programs who were provided with an opportunity to learn about AE and apply that knowledge to their planning and teaching of content area lessons. The findings from this study will add to the research base in several of the areas suggested by Bunch (2013), such as

mainstream teachers' current conceptions of language, literacy, and ELs; how those conceptions change over the course of time; what affects this development; how teachers' practices changes as a result of interventions based on the various notions of pedagogical language knowledge; and, of course, the relationship of all of the above to teachers' classroom practice and student outcomes. (p. 329)

In previous studies, the researchers working with this population have either described the intervention in detail (e.g. Staples & Levine, 2014) or presented findings related to the outcomes of the intervention (e.g. Mitchell, Homza, & Ngo, 2011; Homza, Garrone-Shufran, & Herrmann, 2014) but not both. According to Anstrom et al. (2010),

there is a need for "more rigorous documentation and evaluation" of programs "designed to develop teacher knowledge and skill in AE" (p. viii). This study aimed to both document and evaluate one intervention, implemented in a teacher education program, which was designed to provide mainstream TCs with knowledge about identifying and teaching features of AE. In terms of documentation of the program, a detailed description of the training, along with the lesson planning worksheet which TCs are taught to use in the training, are provided in the Appendix. Outcomes, in the form of TCs' identifications of features of AE in their lesson plans and in their teaching of a content area lesson, are presented and discussed. The data collected from TCs in this study provided information on the extent to which the training was effective in terms of their identification and teaching of features of AE in their fieldwork placement classrooms.

The results of the study are important for faculty in teacher education programs, both at the university where the research was conducted and at universities considering how to integrate knowledge about teaching AE into their teacher education program. For faculty and other stakeholders at this university, the examination of the outcomes of this intervention may lead to the proposal of revisions and improvements to the training. For teacher education faculty at other universities, the findings of this research illustrate how TCs apply what they learn in the teacher education program to the lessons they plan and teach in their fieldwork placements. These findings are important as all teacher education programs ponder the effect that coursework has on actual teaching practice and consider the other factors that influence TCs' teaching practice. Additionally, for faculty in schools of education where decisions have yet to be made about how best to integrate knowledge about AE into the teacher education program, this study describes the content

and the outcomes of a method for providing TCs with opportunities to learn about AE without making significant alterations to the structure of the program. Infusing the necessary knowledge and skills to teach AE throughout the sequence of courses is considered to be a long-term goal for teacher education programs (Lucas, Villegas, & Freedson-Gonzalez, 2008). However, in the short term, it might be necessary to test possible methods for integrating these opportunities to learn about language into the structures that already exist in teacher education programs, such as fieldwork experiences. The findings of this study illustrate the successes and the challenges of implementing this intervention during the fieldwork experiences of undergraduate TCs in a university-based teacher education program.

Definition of Terms

In this dissertation, I will use the terms *culturally and linguistically diverse*,

Academic English, mainstream, secondary, WIDA, and SIOP. Although some of these terms have been briefly introduced in the preceding sections, I define each term below.

I use the term *culturally and linguistically diverse* (CLD) to refer to students who live in a household where a language other than English is spoken. This population is also sometimes referred to as First Language Not English (FLNE) students, English Language Learners (ELL), English Learners (EL), English as a Second Language (ESL) students, limited English proficient (LEP) students, language minority students, or bilingual learners. I chose to use the term *CLD* to reflect the wide range of language backgrounds and experiences that these students bring to classrooms. When citing sources, I employ the terminology used by the researchers.

Academic English (AE) is used in this dissertation to refer to the language that is expected and used in the context of schooling. This language is sometimes called the language of schooling or academic language. This research defines AE as a set of discipline-specific language functions and word, sentence, and discourse level features used to express those functions. A brief description with examples was presented in this chapter; the concept will be explained more fully in the theoretical framework.

The term *mainstream* is used to refer to classes in U.S. schools in which English is the language of instruction. Mainstream classes are those which traditionally are not designed to specifically meet the needs of CLD students or students with disabilities. The TCs discussed in this dissertation are also referred to as *mainstream* as they are preparing to teach mainstream classes. However, all TCs in this teacher education program, due to state regulations, are being prepared to teach Sheltered English Instruction (SEI) classes, meaning that they will be qualified to teach mainstream classes that include ELL students.

Secondary, in this dissertation, is used to refer to TCs who are either majoring or minoring in Secondary Education. Secondary TCs at the university in which this research was conducted intend to teach a specific discipline (biology, chemistry, physics, earth science, math, English, history, French, Spanish, or Latin) in grades eight to twelve.

WIDA (formerly World Class Instructional Design and Assessment) refers to the WIDA Consortium, a "non-profit cooperative group whose purpose is to develop standards and assessments that meet and exceed the goals of No Child Left Behind and promote educational equity for English language learners" (WIDA, 2014). The state in which the research was conducted is a member of the WIDA Consortium and, therefore,

uses the WIDA standards and assessment tools to guide the instruction and measure the progress of ELL students in public schools.

The SIOP (Sheltered Instruction Observational Protocol) model, which was originally designed to be a teacher evaluation tool, is taught in both pre-service and inservice contexts as a way to plan lessons that support the academic achievement of CLD students (Echevarría et al., 2008). The SIOP model is taught to TCs at the university in which the research was conducted as a method for planning instruction that supports the achievement of CLD students.

CHAPTER 2-DEVELOPING THE DISCIPLINARY LINGUISTIC KNOWLEDGE OF MAINSTREAM TEACHERS: A FRAMEWORK AND A REVIEW OF THE LITERATURE

The theoretical framework for this research was drawn from two different conceptualizations of the necessary knowledge for teaching CLD students, Disciplinary Linguistic Knowledge (DLK) (Turkan et al., 2014) and linguistically responsive teacher preparation (Lucas, Villegas, & Freedson-Gonzalez, 2008; Lucas & Villegas, 2011). In the first section of this chapter, I explain in more detail the concept of DLK and explain a framework for developing DLK in a teacher education program through engaging TCs in a subset of the tasks to prepare teachers to teach ELLs proposed by Lucas and Villegas (2013). These tasks, created through the integration of the elements of the Linguistically Responsive Teacher framework (Lucas, Villegas, & Freedson-Gonzalez, 2008; Lucas & Villegas, 2011) with Feiman-Nemser's (2001) framework of teacher development, describe a "coherent approach to preparing teachers of CLD students that begins in preservice programs" (Lucas & Villegas, 2013, p. 98). The second section of this chapter presents previous research related to engaging in tasks such as the ones described by Lucas and Villegas (2013) as a method for developing DLK.

Developing Disciplinary Linguistic Knowledge in a Teacher Preparation Program

Turkan et al. (2014) described DLK as a "teacher knowledge base that takes into account the most recent understanding of the role of language in teaching content in the classroom" (p. 5). DLK is comprised of two subdomains, the ability to identify linguistic features and choices in disciplinary discourse and the ability to model these features for students.

Developing the Ability to Identify Linguistic Features

The first subdomain of DLK is "the ability to identify the linguistic features and choices that are appropriate to the disciplinary discourse" (Turkan et al., 2014, p. 9). In order to provide access to the content, teachers must be able to recognize the linguistic features that are used to create meanings in text and explain this form-meaning connection to students. The first subdomain of DLK draws from both the systemic functional linguistics perspective on academic language and Scarcella's (2003) framework of AE, both of which will be summarized briefly in this section.

From a systemic functional linguistic perspective, as explained by Halliday (1978), social interactions take linguistic forms known as texts. All texts occur in a context of situation, which are formed by the field (topic), tenor (relationship between participants), and mode (written or spoken). Together these three elements determine the register of the text and are linked to the linguistic components of the text. Schooling is a context in which certain registers are valued for their effectiveness in conveying the desired meanings, and these registers are very different in grammatical and lexical features than the registers used in more informal, social contexts (Schleppegrell, 2004). Schooling presents students with situations with new field, tenor, and mode configurations, and those configurations bring with them new sets of linguistic features. In this way, schooling requires that students learn and master new registers that correspond to school-based tasks (Schleppegrell, 2004).

In describing the differences between the registers of everyday language and the registers used for academic purposes, Schleppegrell (2006) explains that academic language "present[s] dense information, abstraction, and technicality, using multiple

semiotic systems and conventional structuring and projecting an authoritative voice" (p. 49). Schleppegrell (2004) presented some linguistic choices at the word, sentence, and discourse level that correspond with these aspects of academic language. For example, the inclusion of technical vocabulary and specific nominal and verbal groups builds technicality and abstraction. Density is created by the use of nominalization and grammatical metaphor and in the embedding and combining of clauses. A distant, authoritative stance is realized through the use of the declarative mood and modals which allow writers/speakers to express degrees of probability, certainty, and necessity.

Becoming a proficient user of the register requires "learning the constellation of interacting grammatical and discourse features that realize the new situational context of schooling" (Schleppegrell, 2004, p. 76). Students may not have encountered these academic language features in their previous schooling experiences and will need instruction in how to make the expected meaning from these features (Fang & Schleppegrell, 2008).

Turkan et al. (2014) add to their explanation of linguistic features by drawing on Scarcella's (2003) framework of AE, which describes the specific features of AE at the word, sentence, and discourse level used to engage in tasks and make meaning in the various disciplines. Although the specific linguistic features may vary among the disciplines, there are well-defined, teachable aspects of the construct of AE that cut across disciplines. Teachers should be able to identify the lexical, grammatical, and discourse components of AE that students must learn. There are features at the word, sentence, and discourse level that could be taught to students in discipline-specific contexts.

The lexical component of AE consists of the words students must know and what they must know about them. There are three types of vocabulary words that students need to use in academic contexts: general, non-academic words; technical words that are discipline-specific; and general academic words that are used across disciplines or have multiple meanings. To use these words, students must know the meanings of the words, their parts of speech, and the rules regarding their usage.

The grammatical component of AE includes constructions not commonly used in everyday contexts, such as conditionals, parallel clauses, and passive voice. Other grammatical components expand on constructions students may already know and use in everyday contexts. Although students may know the more commonly used modals, such as *can*, they must learn the meanings and uses of the variety of modals that appear in academic contexts, such as *ought to*. As students encounter new nouns and noun forms, they must learn rules about the subject-verb agreement, pluralization, and article usage for those nouns, and they must be taught to use explicit references, which are necessary in formal, written language but not in more informal contexts. In order to use the verbs common in AE, students must learn the characteristics of these verbs, such as transitivity and tense formation; they must also understand that there are certain verb and preposition combinations that can not be altered, such as *disagree with*, which is a set phrase in English.

Scarcella (2003) broadly described discourse level features as those that create organization and coherence in texts. A more specific description of discourse semantics is enumerated by Martin and Rose (2008) in their explanation of genre theory. According to Martin and Rose (2008), language features at the discourse level can be analyzed in terms

of appraisal, ideation, conjunction, identification, and periodicity. Appraisal is the use of language to express feelings or values about a topic. Ideation refers to the content presented in a text, whether a sequence of events or the description or classification of a person or object. Conjunction is the way in which "text segments are linked to each other in series" (p. 33). Identification considers the different ways in which participants are referred to throughout a text. Periodicity refers to the different structural or organizational patterns and language features which are used to construct the various genres of text.

Scarcella's (2003) notion of organization, in which signal words and text connectives are used to demonstrate the relationships between ideas, seems to correspond to Martin and Rose's (2008) system of conjunction. She described coherent texts as those that are "orderly", maintain consistent perspective, opinions, and reference, and cover the topic thoroughly (p. 19). This description of coherence seems to explain how the systems of periodicity, appraisal, identification, and ideation work to create meaning at the discourse level.

The ability to identify linguistic features and choices in disciplinary discourse could be developed in TCs by teaching them to analyze language for the purpose of identifying features of AE. Lucas and Villegas (2013) proposed that teacher educators could guide TCs through the processes of analyzing the language of the classroom and the language of the discipline. However, before TCs can identify language features, TCs need to view language as an "object of analysis, not simply an unanalyzed medium of communication" (Lucas & Villegas, 2013, p. 105). Lucas and Villegas (2013) acknowledged that TCs most likely have no experience looking at language in this way, and they will need to be taught how to analyze language. The task of cultivating an

awareness of language as a focus of analysis can be seen as the first step. Once TCs have been made aware of the register of AE and the common linguistic features of AE, then they can be guided by teacher educators to conduct analyses of the language of the classroom and the discipline. Figure 2.1 shows how engagement in the three tasks described by Lucas and Villegas (2013) may be used to develop the ability to identify features of academic language, the first subdomain of DLK.

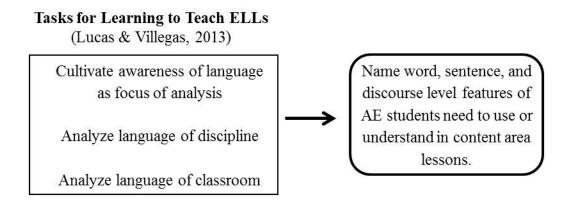


Figure 2.1. Tasks for developing the ability to identify linguistic features.

Developing the Ability to Model These Features

For TCs, fully developing DLK involves not only recognizing the linguistic challenges of the discipline but also teaching these features to students who are then expected to understand and use them. As Feiman-Nemser (2001) explained, "[a]n important part of learning to teach involves transforming different kinds of knowledge into a flexible, evolving set of commitments, understandings, and skills" (p. 1048). It is not enough for teachers and TCs to have knowledge, but they must determine how to incorporate that knowledge into their teaching practice in a way that will improve student

outcomes. In this way, the ability to identify features of AE must be accompanied by the ability to model and teach these features to students, particularly CLD students.

The second subdomain of DLK is the ability of teachers and TCs to model the language features students are expected to use and then provide students with opportunities to use these features in listening, speaking, reading, and writing tasks. In this way "teachers' knowledge of disciplinary discourse makes it possible to transform the linguistic challenges into opportunities to model various uses and functions associated with the particular discipline and to engage ELLs in the expected use of disciplinary discourse" (Turkan et al., 2014, p. 20). Although there is little research on effective practices for teaching features of AE to CLD students, Ranney (2012) mentioned such "promising approaches" as "building rich academic conversations and habits of communication that foster AL, developing greater awareness of AL features (especially drawing on SFL analyses) among both teachers and students, and scaffolding students to notice and use language features explicitly while engaged with academic content in a teaching-learning cycle" (p. 570-71). Turkan et al. (2014) suggested that teachers "engage ELLs in learning how the rules of the linguistic features function to convey meaning in the content area" so that students "explore and build form-meaning connections to read, write, listen, speak and think in the language of the discipline" (Turkan et al., 2014, p. 11). Teachers, therefore, must explicitly model how the features of AE are used to make meaning. They must also design activities in which students practice making meaning from these features in reading, writing, speaking, and listening.

TCs demonstrate their knowledge of the second subdomain by incorporating explicit instruction in the use of language features into their lesson plans. As part of

Feiman-Nemser's task of developing a beginning repertoire, Lucas and Villegas (2013) described the need for TCs to become "familiar with a basic set of practices and tools to support ELLs' learning." In their earlier work, Lucas and Villegas (2011) listed "scaffolding instruction to promote ELL students learning" as a skill of linguistically responsive teachers. Providing CLD students with instruction and support in using features of AE is one aspect of promoting student learning, so this type of instruction seems to fall into this category of "best practices and tools to support ELLs' learning".

Furthermore, Lucas and Villegas (2013) suggested that TCs do not need to simply learn about these practices that support the learning of CLD students but that the teacher education program must offer them opportunities for "applying these practices and tools, with support and mentoring by teachers and teacher educators" (p. 103). In teacher education programs, TCs learn about practices or tools for teaching language through coursework or observation of teachers in their fieldwork placements. Then TCs must incorporate these practices or tools into their actual teaching practice by including them in the lesson plans they create for their fieldwork placements. They are supported throughout this process by teacher educators, supervisors, and cooperating teachers. It is the responsibility of these more experienced practitioners to assist TCs in incorporating the effective practices they have learned into their lesson plans. Once the lessons have been planned, then the TC must enact the lesson plan. Figure 2.2 illustrates how engagement in the two selected tasks from Lucas and Villegas (2013) may be used to develop the ability to plan and teach lessons that include explicit instruction in specific features of AE. The lesson plan is separated from the teaching of the lesson in this model, because TCs do not necessarily enact lesson plans as they are written.

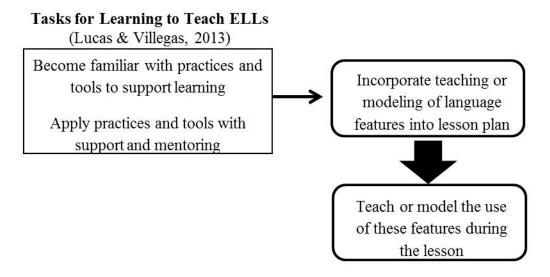


Figure 2.2. Tasks for developing the ability to model linguistic features.

A Visual Model of the Development of Disciplinary Linguistic Knowledge in a Teacher Education Program

The visual model (Figure 2.3) depicts how a subset of five tasks suggested by Lucas and Villegas (2013) as ways to prepare TCs to teach ELLs might be used to develop DLK in a teacher education program. Guided engagement in the first three tasks helps TCs to develop the ability to identify linguistic features and choices, an ability they demonstrate by naming word, sentence, and discourse level features of AE that students must use of understand in a lesson. Learning to plan and implement instruction in the features they have identified with the support and guidance of teacher educators aids TCs in cultivating the ability to model linguistic features for students. In naming features of AE present in the lesson, planning to teach those features, and actually enacting that planned instruction, TCs demonstrate that they are developing the two subdomains that comprise the concept of DLK. TCs' engagement in the tasks is represented as cyclical.

Throughout their time in the teacher education program, TCs continue revisiting these tasks and continue developing their ability to apply what they have learned to their planning and teaching of content area lessons.

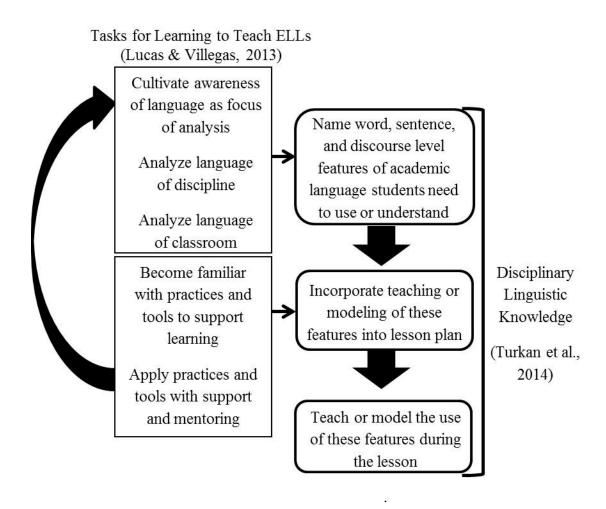


Figure 2.3. A visual model for the development of DLK in a teacher education program¹.

Review of the Literature

The aim of this review of the literature is to present and synthesize the research on approaches in which teachers and TCs were engaged in the types of tasks described by

¹ Based on the work of Lucas and Villegas (2013) and Turkan et al. (2014)

Lucas and Villegas (2013) as a means for preparing teachers to identify and teach features of AE. I begin my review of the literature with a brief discussion of the themes related to preparing teachers to identify and teach AE which emerged from two previous reviews of the literature, one by Lucas and Grinberg (2008) and the other by Bunch (2013). Then I present recent research on initiatives designed to prepare teachers to identify and teach AE, the requisite subdomains of DLK, through engagement in tasks similar to those five tasks from Lucas and Villegas (2013).

Preparing All Teachers to Teach Academic English

In their review of the literature on the preparation of all teachers to teach CLD students. Lucas and Grinberg (2008) discussed two themes which may be viewed as necessary aspects of any initiative to prepare teachers to teach AE. One theme was "the critical importance of linguistic knowledge for teachers" (p. 626). There is a great deal of knowledge about language that must be presented to teachers, including knowledge about the process of second language acquisition and the forms and structures of language, and teachers must be able apply that knowledge in order to design instruction that supports their students' academic success. Teachers should also have the opportunity to engage in varied language experiences, including studying a second language and having extended contact with individuals who speak another language.

Bunch's (2013) review of the literature was focused specifically on approaches for developing pedagogical language knowledge, the knowledge base that teachers would need in order to teach AE. Bunch found that the approaches described in the literature fell into one of three categories based on the conception of language from which each approach was developed: a systemic functional linguistics focus on the language of texts

and tasks; a genre-based pedagogy integrated with a critical language awareness perspective; and a sociocultural approach to language in which students are apprenticed into language-based practices. Regardless of the conception of language in which each approach was based, the approaches he described, which had been implemented with TCs and in-service teachers at various grade levels across various disciplines, had many similarities to one another. All the approaches he described focused on the same goals, namely preparing teachers to support CLD students in their use of AE and developing in all teachers an understanding of the extent to which notions of audience and purpose shape the language choices in various contexts, both in school and in other social contexts. Additionally, approaches of all three types were grounded in similar assumptions. Bunch explained that the first assumption was that language is "an essential mediator of teaching and learning" as opposed to "either a discrete curricular target (as has often been the case in ESL instruction) or solely a means to communicate the content one had already learned (often the view held by mainstream teachers, especially at the secondary level)" (p.329-30). The second assumption was "that ELs develop language and literacy in and through engagement with the kinds of texts and practices called for by the common standards" (p. 330).

Engagement in the Tasks

In my review of the literature, I bring together findings and recommendations from recent research conducted on initiatives in which teachers or TCs were engaged in one of the five tasks from Lucas and Villegas's (2013) framework described in a previous section. Research studies in which TCs or teachers were engaged in analyzing language or learning about and applying effective practices or tools for teaching AE are described.

To avoid overlapping with the previous review by Bunch in 2013, studies published since 2013 and smaller studies that were not included in Bunch's review are included. Additionally, I have added to this literature review a small number of studies in which the SIOP model (Echevarría, Vogt, & Short, 2000; 2004; 2008; 2012) was presented to teachers in both pre-service and in-service contexts. The SIOP model is not in and of itself a way of teaching language. However, a small group of studies of teachers and TCs learning to apply specific, language-related SIOP features to their planning of lessons, a facet of this model which might be considered a practice or tool for teaching AE, are included in this review. Since the university where I conducted the research teaches the SIOP model to TCs in courses, meaning that TCs might already be familiar with it, I felt it would be important to investigate its use as a tool for planning and teaching instruction in AE.

There were two additional criteria for inclusion in my review on approaches for preparing mainstream teachers to identify and teach features of AE. First, in order for a study to be included, the researchers needed to present data, whether formally or informally collected and analyzed, on the impact that engaging the teachers or TCs in the tasks had on either their implementation of what they learned or their beliefs or attitudes toward implementation. This choice was made because the research described in this dissertation studied the impact of an intervention on TCs' actions and beliefs as they completed fieldwork experiences. Also, since the focus of this dissertation was approaches for preparing mainstream teachers, the study population needed to include mainstream teachers.

Cultivating Awareness of Language and Analyzing the Language of the Classroom and the Discipline. In order for teachers to teach AE to their students, they first must be able to recognize features of AE and analyze the texts and tasks of their discipline in order to identify these features. The studies in which pre-service teachers have been trained to look at, rather than through, language (deJong & Harper, 2005) and identify the features of AE that are present have found some evidence that teachers can be taught to analyze the language of the classroom and discipline, especially when presented with a small number of features to identify. The training studied by Mitchell, Homza, and Ngo (2012) was designed to prepare elementary TCs to identify vocabulary words that appeared in texts that they would read aloud to CLD students in their fieldwork placements. Observations of and interviews with nine TCs who received the training in Spring 2007 showed that, overall, these TCs were able to identify and teach vocabulary, although the TCs displayed a range of ability and comfort in doing so.

Unlike the training studied by Mitchell et al. (2012), in which one type of feature was presented, in Homza, Garrone-Shufran, and Herrmann's (2014) study, the researchers presented several features of AE named by Schleppegrell (2004; 2006), including processes, participants and referents, embedded clauses, nominalizations, passive voice, and academic vocabulary, for TCs to identify in their analyses of content area texts. In linguistic analyses of texts submitted by the 21 TCs in the sample, the identifications of academic language features that TCs made were accurate overall, with 77% of the identifications classified as highly accurate by the researchers. However, despite the fact that TCs were taught to identify several types of sentence level features, the most commonly identified feature was vocabulary (39% of identifications). In their

written reflections on the analysis assignment, the TCs reported that they felt overwhelmed by the number of language features presented in the initial training. Homza et al. acknowledged that this finding reinforces the notion that, when presenting language to teachers, there is a "need to focus on a small number of accessible and readily applicable concepts" (p. 184). The findings of these two studies suggest that teaching TCs to identify a small set of features of AE may be effective, but, since TCs seem able to identify word level features with little difficulty, there should be an increased focus on teaching them to identify sentence and discourse level features as well. An approach to teaching TCs to analyze language should be designed to present TCs with a small set of easily recognizable features of AE at the word, sentence, and discourse level that they can identify in the texts and activities they use in the classroom.

Become Familiar with Practices and Tools to Support Learning. Teachers and TCs must learn not only how to analyze language but how to integrate effective practices and tools to support students' learning of AE into their lessons. In studies by Willett and Correa (2014) and Schall-Leckrone and McQuillan (2012), revising courses to include a more practical focus on the application of knowledge about language to teaching practice was found to improve teachers' perceptions of preparedness to use what they had learned in their teaching practice. Willett and Correa (2014) described a course designed to teach in-service elementary teachers about the concept of genre and the language features of each genre. This course was part of a professional development program designed by teacher educators to prepare elementary school teachers in a local school district to work with CLD students. After one iteration, the course had been revised, because instructors found that teachers could identify some language features but "had difficulty addressing

the particular language needs of their students" (p. 159). In the revised version of the course, in-service elementary teachers learned to identify various genres and the language features that were used in those genres and then practiced identifying these language features in student-produced texts. Teachers moved between whole group presentations, in which they were provided with explanations of how language works at the clause level, and small group discussions, in which they worked with a doctoral student or instructor to analyze the language features used in a focal student's texts. Teachers reported feeling positive about the SFL concepts they had learned, and some had begun to integrate what they had learned into their writing instruction and the feedback they provided on student writing. However, Willett and Correa (2014) acknowledged that the teachers' use of SFL to analyze texts was accomplished with much scaffolding and that teachers would need much more exposure to and practice with using SFL to analyze texts to become comfortable with the process.

In Schall-Leckrone and McQuillan's (2012) study of two cohorts of TCs who took slightly different iterations of history methods course in which they were taught to analyze and teach features of AE, participants were taught about features of academic language common to the discipline of history and language-based strategies to help ELs gain academic language proficiency. They were also taught various strategies for making meaning from history texts using SFL terms and techniques. In the first iteration, TCs were guided through a process of using a functional language approach to make meaning from the text. However, in the second iteration of the course, the TCs were taught more general literacy strategies and only one strategy that required specific SFL knowledge, the strategy of tracking the chain of reference in a text. From the surveys collected from

55 participants, 30 in the first cohort and 25 in the second cohort, the researchers discovered that the participants found analyzing history texts using SFL theory and terminology not helpful. Data from interviews suggested that TCs would need both more knowledge about SFL and more practice with processes like these in order for them to be useful in their teaching of history. Even the participants in the second cohort, who were presented with instruction in fewer specific linguistic features, still were not able to make the connection between the linguistic knowledge and the application of that knowledge to the teaching of history.

While participants may not have found the process of analyzing texts helpful, the TCs in Schall-Leckrone and McQuillan's (2012) study did feel more prepared to teach CLD students after taking the infused methods course. The researchers found that shifting the focus of the modules from analyzing AE in texts to teaching strategies and applications to teaching seemed to create in TCs a stronger feeling of preparedness to work with CLD students. The second cohort received the revised version of the course, which focused more on straightforward strategies and practical applications to teaching. Participants in the second cohort seemed to feel even more strongly that they were prepared and able to teach academic language in a mainstream history class. The data from the surveys collected by Schall-Leckrone and McQuillan (2012) showed that, although there were statistically significant differences in participants in both cohorts' responses to items on the pre and post survey related to these feelings of preparedness, the differences from pre to post-survey were larger for the second cohort and more items related to feelings of preparedness had statistically significant differences. In terms of the TCs' perceptions of their ability to teach the language of history, responses from the first

cohort showed no statistically significant difference in how they perceived their ability to teach the language of history, but there were significant differences in the responses from the second cohort. These reported differences in feelings of preparedness and the ability to teach the language of history between the cohorts may be related to the changes the researchers made to the modules before they were delivered the second time.

Schall-Leckrone and McQuillan (2012) also found that TCs benefitted from learning about effective instruction for CLD students from multiple sources at the same time. Eleven of the 25 participants in the second cohort were taking a course in teaching CLD students at the same time as they were taking the history methods course; this additional source of information about strategies for teaching CLD students may have influenced the students' feelings and, as a result, influenced their responses on the survey. They suggested that "a multi-faceted and coherent approach to preparing teachers to meet the needs of ELs in mainstream classes" is needed (p. 257). This type of program coherence might involve coordinating the efforts of professors and teacher educators at the university and teachers at practicum sites to "reinforce" what TCs are learning about being effective teachers of CLD students.

The findings from the studies of Willett and Correa (2014) and Schall-Leckrone and McQuillan (2012) suggest that approaches must balance the delivery of knowledge about AE with the development of practical strategies for applying that knowledge to teaching. Teachers become especially invested in applying their knowledge when the practices or tools are immediately applicable to their own classrooms, like the teachers in Willett and Correa's study who were able to use what they were learning to analyze their students' writing. Also, as Schall-Leckrone and McQuillan found, creating consistency in

a teacher education program by teaching TCs the same practices and tools across courses may help to increase TCs' feelings of preparedness to implement these practices.

Using the SIOP Model to Integrate the Teaching of Academic English into **Lessons.** One tool used in the teacher education program where this research took place is the SIOP model, which is presented to TCs as a part of the course on CLD students. The model consists of eight components of lesson planning, with 30 features described in these eight components. Several of the features of the SIOP model are related to the identification and teaching of AE. In order to implement the second feature, "language objectives clearly defined, displayed, and reviewed with students", teachers would need to identify the features of AE that would need to be used or understood to successfully complete one or more tasks included in the lesson plan, as language objectives should reference key vocabulary, grammar or language structures, or the language needed to accomplish a lesson task (Echevarría et al., 2008, p. 25). In the SIOP model, language objectives must also be "clearly supported by lesson delivery" (p. 154). In order to provide clear support of a language objective, teachers must incorporate explicit instruction in the specific language they included in the objective during the lesson. Echevarría et al. (2008) presented an example of a lesson in which a language objective requires that students "defend a position". In order to support that objective, it would be necessary for the teacher "to spend some of the period discussing or modeling persuasive speech" (p. 154). In a lesson in which the language objectives are supported by the lesson delivery, there should be some explanation or description in the lesson procedure of when and how the language identified in the language objective(s) will be modeled for or taught to students.

The large number of SIOP features that teachers and TCs are expected to remember and implement may make it difficult for them to focus specifically on the incorporation of language-related features. Friend, Most and McCrary (2009) reported the results of a survey of middle school teachers who had received professional development in planning and teaching lessons based on the SIOP model. The 70 teachers who participated were asked to name strategies from SIOP that they recalled learning in the professional development and that they thought were effective for use with CLD students. In terms of the language-related SIOP features, only two specific features were named by teachers in the survey. Friend et al. (2009) found that 42% of teachers recalled learning about teaching vocabulary words through the use of strategies, which was likely a reference to the description of vocabulary teaching that accompanies the feature of highlighting key vocabulary. While some teachers stated simply "vocabulary strategies", others teachers named specific strategies, like the Frayer model and a bilingual word wall. A few teachers also recalled learning in the professional development about "language and content objectives" (p. 63). This feature of creating language and content objectives, besides being remembered by teachers, was the only language-related SIOP feature named as an effective strategy for use with CLD students. In the survey, teachers also recalled learning about "a focus on academic language other than key vocabulary", which is not a specific SIOP feature, but this description was not elaborated on by the researchers.

In their study of the implementation of language-related SIOP features by two groups of TCs in their fieldwork placements, Wright-Maley, Levine, and Gonzaléz (2014) found that only one feature directly related to the teaching of AE was among the

SIOP features most frequently implemented by the TCs. This feature, activities in which students apply their content and language knowledge, was implemented by 17 of 22 TCs in the study. However, among the least frequently implemented SIOP features were the other AE-related SIOP features, including displaying and reviewing language objectives, creating lessons that support the language objectives, and reviewing key vocabulary words.

Additionally, the researchers found a disparity between what features TCs incorporated into their lesson plans and features they actually enacted in their teaching. In the first year of their study, none of the eleven TCs posted and reviewed their language objectives with students, despite the fact that half of them wrote language objectives into their lesson plans. As a result of this finding, the next year, instructors emphasized in their courses the need to post and share language objectives. In the next year, two TCs fully enacted this feature and five partially enacted it, which was defined by the researchers as meeting some but not all criteria of the feature. This finding from Wright-Maley et al. (2014) suggests that TCs planning of a lesson is not necessarily reflective of what they end up implementing in the classroom and also that TCs' implementation of practices in their teaching can be influenced by what teacher educators choose to emphasize in their courses. The findings from the studies conducted by Friend et al. (2009) and Maley-Wright et al. (2014) suggest that teachers and TCs may be overwhelmed as they try to learn and incorporate all of the SIOP features into their teaching practice. For this reason, they may not remember the features related to the teaching of AE and, therefore, may not implement features that will help them to teach features of AE.

Staples and Levine (2014) collected informal data from students in different teacher education courses in order to compare the effects that different methods for integrating the use of the SIOP model had on TCs' beliefs and attitudes towards teaching language. In a secondary math methods course in which teaching the register of math was the focus, TCs were introduced to the concept of register and were taught to analyze the language of math in order to identify language demands. The teacher educator then spent a large portion of the semester guiding TCs to implement a subset of specific SIOP features she considered "high leverage", including writing language objectives, designing instruction to support these objectives, and creating assessments to determine whether students met these objectives (p. 69). This specific focus on identifying the language of math and planning lessons that incorporated the explicit instruction and assessment of the language they identified seemed to impact TCs' commitment to teaching language. When the nine TCs who took the course in Fall 2012 were surveyed at the end of the semester, eight of the nine replied that it was "very important" to "actively teach for language development in the mathematics classroom" (Staples & Levine, 2014, p. 69). The researchers asserted that, since the focus on language in the course was never explicitly linked to the teaching of CLD students, this frame "supports a commitment to focusing on language regardless of whether preservice teachers yet experience a pressing need to learn how to teach emergent bilinguals" (p. 68). One drawback seen with this type of focus on the language of a specific discipline is that this focus does not lend itself to including information on scaffolding learning for CLD students or highlighting the strengths that CLD students bring with them into the classroom.

In the other group of courses described by Staples and Levine (2014), a rotation of intensive elementary social studies, math, and science methods courses, TCs were informed about the demographic trends involving CLD students. They were told that that all teachers would need to work with CLD students in the future and that CLD students needed well-trained teachers to help them achieve in school. The SIOP model (Echevarría et al., 2008) was then presented to the TCs as the training that they would need to be effective teachers of CLD students. Although the 77 TCs who took the infused methods courses in 2010 and 2012 expressed on exit slips that the SIOP model provided them with teaching strategies they could use with CLD students, their responses did not include any mention of language or language development, suggesting that the TCs did not understand "the specific affordances of and need for these SIOP tools" (p. 74).

Although the elementary TCs' lack of understanding of how SIOP features might be used to support the language development of CLD students seems to support the findings of Friend et al. (2009) and Maley-Wright et al. (2014), the secondary math TCs' understanding of the need to teach language in math provides some hope for the use of the SIOP model to incorporate language teaching. In the secondary math methods course, the teacher educator's focus on teaching a small subset of AE-related SIOP features that TCs should incorporate into their lesson plans resulted in TCs expressing their belief that teaching language was not only important but that it was also part of their responsibility as math teachers. Although Staples and Levine (2014) provided no evidence of TCs' implementation of these features, learning about a selected group of SIOP features related to the teaching of features of AE did seem to help TCs to feel positively about teaching language, a feeling which may in turn make them more likely to do so in the future. The

findings of Friend et al. (2009), Maley-Wright et al. (2014), and Staples and Levine (2014) suggest that focusing on a small number of SIOP features at one time may increase the likelihood of their implementation and that emphasizing the importance of these features to teachers or TCs may also impact their inclusion in lesson plans and teaching practice.

Apply Practices and Tools with Support and Mentoring. Regardless of what practices and tools teachers and TCs are taught to utilize, they need support and mentoring in order to implement what they have learned in their teaching practice. In previous studies, teachers who have received support or coaching from language experts have been able to integrate practices for teaching AE into their content area lessons. MacDonald, Nagle, Akerley, and Western (2012) described how a high school biology teacher and an ESL teacher, co-teachers of a college preparatory biology class, worked with a secondary science professor and a university-based ESL specialist in a professional learning community (PLC) to "identify the specific language structures used to accomplish the cognitive and linguistic tasks of science" (p. 95). The team engaged in analysis of the language features of science texts, which helped the teachers to see firsthand how the use of language features and the expression of cognitive functions were inextricably linked. Both the biology and the ESL teacher were then able to teach and model the use of language structures for students while also explaining how these structures functioned to create meanings in text. This explicit instruction in the language of science provided by the two teachers improved students' writing of lab reports. The authors provided student writing samples from both CLD and non-CLD students to illustrate that students' writing included "limited data interpretation and few supportable

inferences" before they received instruction in the language of data interpretation but showed "increased specificity of descriptions and more careful attention to degree of certainty of stated inferences" after instruction (p. 97). This process, which "incorporate[d] collaborative analysis of the higher-order cognitive demands of biology with functional analysis of the language needed for deep engagement", proved beneficial for the co-teachers and the students (p.98).

Homza et al. (2014), in addition to providing training to TCs, also trained five inservice teachers to identify features of AE through engaging in analysis of content area texts. The researchers then provided one-on-one coaching for these teachers to support them as they planned a lesson in which they taught one feature of AE they identified in their analyses. The three teachers who were interviewed reported that the support of a language specialist was helpful as they were trying to plan language-focused lessons and that type of support had not been offered to them previously. However, none of the three teachers had analyzed a text since the intervention ended. The researchers suggested that sustained coaching might increase in-service teachers' use of the process of text analysis taught to them.

When teachers are not provided with or do not take advantage of support and mentoring, they do not necessarily implement what they have learned about teaching AE. Arguably the largest of the initiatives designed to prepare mainstream teachers to teach AE, the *Building Academic Literacy through History* professional development project, provided training for 268 teachers over five years. Schleppegrell, Greer, and Taylor (2008), reporting on the outcomes of this initiative, explained that some teachers who participated in the professional development initiative felt positively about their ability to

incorporate what they had learned into their teaching and some did not. One of the authors, a middle school English and history teacher in an urban school, modeled the strategies of sentence chunking and tracking reference devices using sections from the history textbook; then students practiced the strategies on their own to help them answer questions about the text. The teacher felt that engaging students in this type of analyses slowed them down and helped them to focus on the meaning of the text, which other participating teachers had also reported. In addition, she felt that the students had a better understanding of the concepts of the chapter, which benefitted them as they studied other, related history topics. She saw improvements in their writing; their essays included the essential features of historical reasoning, including a thesis statement, evidence, analysis, and conclusions. Other teachers, according to Schleppegrell et al. (2008), reported having engaged in discussion about texts with students using the strategies and had been "pleased with the questions and insights that students offer as they engage with history texts in this way" (p. 184). Conversely, some teachers had expressed the need for more coaching and more support to be able to incorporate the strategies into their teaching practice; however, only about 10% of teachers had taken advantage of the follow-up training that had been offered (Schleppegrell al., 2008). The presence or absence of support and mentoring for teachers and TCs as they attempt to apply what they have learned about teaching AE seems to be an important factor in their implementation of practices and tools for teaching AE in classrooms.

Summary

This research was based in the concept of DLK (Turkan et al., 2014) and the elements of linguistically responsive teacher preparation. Through engagement in a

subset of tasks created in integration of the elements of the Linguistically Responsive Teacher framework (Lucas, Villegas, & Freedson-Gonzalez, 2008; Lucas & Villegas, 2011) with Feiman-Nemser's (2001) framework of teacher development, TCs could develop the ability to identify and teach features of AE, the two abilities described in the concept of DLK (Turkan et al., 2014). TCs were guided to conduct analyses of the language of their discipline and classroom for the purpose of identifying language features that students would need to use or understand. Then TCs learned to apply practices and tools that they could use to teach these language features to students in their content area lessons.

Initiatives designed to prepare teachers to identify and teach AE must provide the participants with knowledge about AE, practical ways to apply this knowledge to their teaching practice, and support and mentoring to assist in this application of knowledge. Learning to analyze language has been found to provide teachers and TCs with some knowledge about features of AE, especially word level features. When TCs have been provided with training in identifying the language demand in texts, they have been able, for the most part, to successfully identify vocabulary words, but their analyses have not provided clear evidence of their ability to identify features at the sentence level or above (Mitchell et al., 2012; Homza et al, 2014), suggesting that future approaches should focus more on sentence and discourse level features. Teachers need to learn practical ways to apply their knowledge about features of AE to their teaching practice (Willett & Correa, 2014; Schall-Leckrone & McQuillan, 2012). Learning about a small, focused set of practices for teaching AE may prove to be more effective in terms of the actual implementation of those practices (Friend et al., 2009; Staples & Levine, 2014). Although

receiving instruction in implementing strategies for teaching AE has a positive effect on TCs' feelings of self-efficacy in terms of teaching CLD students and their commitment to teaching language in the content areas (Schall-Leckrone & McQuillan, 2012; Staples & Levine, 2014), simply learning about them did not guarantee that those strategies would be implemented in practice (Wright-Maley et al., 2014). In addition to knowledge about how to teach AE, teachers and TCs need support from teacher educators and mentors who can help them to apply what they have learned to their planning and teaching of lessons (Schleppegrell et al., 2008; MacDonald et al., 2014; Homza et al., 2014).

CHAPTER 3-METHODS

A mixed methods research design was employed to examine the impact that an intervention in a teacher education program had on TCs' identification and teaching of features of AE in content area lesson plans. In this chapter, I briefly describe the context in which the research was conducted. Then I present the mixed methods research design, in which both quantitative and qualitative data sources were collected from TCs who had participated in an intervention, and I explain the strategies utilized to promote the validity and reliability of the findings of the study. The chapter ends with a brief discussion of researcher positionality.

The Context: The Teacher Education Program at Edmond University

This study was conducted in the undergraduate teacher education program at Edmond University¹, a private university located in a suburb of a large city in the northeastern United States. There were 613 undergraduate students enrolled in the school of education at Edmond in September 2014. This population was 87.6% female and 12.4% male. There were 133 students in the Secondary Education program, 128 of whom were majoring in Secondary Education. A major in Secondary Education is designed to prepare TCs to teach a specific discipline to students in grades eight to twelve. Undergraduates who major in Secondary Education must also major in the discipline they plan to teach: biology, chemistry, earth science, physics, history, English, or mathematics. Alternatively, undergraduates who major in any of those disciplines in the School of Arts and Sciences may choose to minor in Secondary Education; students who major in Classical Humanities, French, Latin, and Spanish are also eligible to minor in

¹ The name of the university and the names of TCs have been replaced with pseudonyms.

Secondary Education. In Fall 2014, there were 5 undergraduates enrolled in Secondary Education as a minor.

Undergraduate students who choose to major or minor in Secondary Education must complete three required pre-practicum experiences before their full practicum experience in their senior year. During these three pre-practicum experiences, TCs visit an assigned school site for one full day per week for ten weeks. Most TCs complete their first pre-practicum in their sophomore year, and they typically complete their second and third pre-practicum experiences in their junior year. For all secondary TCs, the first pre-practicum experience is at a large, urban high school in the nearby city. In their second and third experiences, secondary TCs are placed at suburban or private schools.

In pre-practicum experiences, there are several TCs assigned to each school site, and the TCs are matched with one or more cooperating teachers in their academic discipline. In each pre-practicum experience, TCs are required to plan and teach a certain number of lessons in one of the cooperating teacher's classes. TCs plan and teach two lessons in their first placement, three lessons in their second, and four lessons in their third. Assigned to each school site along with the TCs is a graduate supervisor, a Master's or PhD student from the education program, who is responsible for observing the TCs and assisting them as they plan and teach their required lessons. While TCs are assigned to teachers who are licensed to teach in their particular discipline, graduate supervisors are not matched with TCs according to discipline.

In the teacher education program at Edmond University, all secondary TCs are required to attend a training session about teaching AE at the start of each semester in which they will be completing a pre-practicum placement. In Fall 2014, the semester in

which this research was conducted, all secondary TCs received the same two-hour training session to prepare them to identify and teach AE in their content areas. The content of this training session is described briefly in this chapter and in greater detail in Appendix A. The training for the TCs in their first fieldwork experience took place during one class period of their introductory curriculum and instruction course, taken at their placement site. TCs in their second and third experiences, who had already learned the content covered in the training during their first pre-practicum experience, attended one training session before they began their placements. TCs are not divided by content area during the trainings.

TCs also learn about teaching AE in the course on teaching bilingual students that they are required to take. The course syllabus states that TCs will learn methods for supporting "linguistic and culturally diverse students across content areas". Although the course does not focus exclusively on teaching AE, TCs are taught about the WIDA standards and how features of AE are defined in the WIDA documents. Also, a large portion of the course is dedicated to teaching TCs to plan lessons according to the SIOP model; several features of the SIOP model are related to planning and implementing language instruction (Echevarría et al., 2008).

The Mixed Methods Research Design

To determine the effects of an intervention designed to provide TCs with knowledge about identifying features of AE and incorporating the teaching of those features into their content area lessons, a mixed methods research design was employed. Mixed methods design is defined by Greene, Caracelli, and Graham (1989) as a design that "include[s] at least one quantitative method (designed to collect numbers) and one

qualitative method (designed to collect words)" (p. 256). According to Woolley (2009), when a study includes research questions that ask both "what and how," a mixed methods design may be the most appropriate choice. This mixed methods study was designed to answer questions related to both *what* TCs learned about features of AE from the training and *how* they incorporated that knowledge into their planning and teaching of content area lessons.

The strategy employed for this mixed methods research design resembled what Creswell (2008) described as a triangulation design. In a triangulation design, a researcher would "simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem" (Creswell, 2008, p. 557). In this study, quantitative data sources were collected from a sample population and, at the same time, qualitative data sources were collected from a smaller group of participants in the sample. Both sets of data were analyzed, and the findings were brought together to begin to answer the overarching research question about the effect of a mandatory training session on TCs' identification and teaching of features of AE. The results from the quantitative data collection were used to explain what knowledge about AE TCs gained from attending the training while the qualitative data provided in-depth descriptions of how individual TCs applied what they learned in the training as they planned and taught lessons in their fieldwork placements. Figure 3.1 illustrates how the triangulation design was used to answer the overarching research question of this study.

QUANTITATIVE

QUALITATIVE

What Features of AE TCs Identified and Incorporated into Lesson Plans

PARTICIPANTS SOURCES

33 secondary TCs in pre-practicum placements Pre-Test/Post-Test Lesson Plan Lesson Planning Worksheet

ANALYSIS

Categorize identifications on scoring guides and recording sheet

How TCs Identified and Taught Features of AE

PARTICIPANTS SOURCES

8 secondary TCs in Observed Lesson pre-practicum Interview placements

ANALYSIS

Code transcripts using constructivist grounded theory (Charmaz, 2000)

What happens when secondary teacher candidates receive training in identifying and teaching academic English in content area lessons?

Figure 3.1. Visual representation of the triangulation research design.

Participants

Recruitment. As shown in the visual representation in Figure 3.1, there were two groups of participants in this study, a larger sample and a smaller, purposive sample. Participants for both groups were recruited during the training sessions held in Fall 2014. At the end of each training session in September and the session for TCs in their first placement in November, I explained the research and its goals to the TCs in attendance, and I described what participation in the larger sample entailed. Consent forms were distributed to and collected from the 53 secondary TCs who attended the trainings. All TCs returned a consent form, signed if they chose to participate and unsigned if they

chose not to participate. When I distributed the consent forms to TCs at the end of the training sessions, I informed them that, at the bottom of the consent form, there was a check box. TCs who consented to participate in the larger sample who were interested in being contacted by me about providing more data were encouraged to check that box.

Initially 41 TCs returned signed consent forms, indicating their willingness to participate in the larger sample. Of those 41 TCs, 16 TCs checked the box inviting me to contact them about further participation in the study. In this group of 16 TCs, there were 6 TCs in their first, 6 TCs in their second, and 4 TCs in their third pre-practicum experience. I contacted these TCs via email. Nine of these TCs responded that they were willing to be observed and interviewed, three TCs at each level of pre-practicum experience. This sample met the demand of the research, as I needed to include TCs from each level in order to answer my proposed research question regarding the differences in the outcomes of the intervention across the levels of pre-practicum experience.

Over the course of the semester, some TCs chose to discontinue their participation. In the larger sample, eight TCs discontinued their participation. In the smaller sample, one of the TCs decided that she would not participate on the day she was to be observed. Therefore, at the end of the semester, there were 33 TCs in the larger sample and eight TCs in the smaller sample.

Sample populations. There were 33 TCs in the larger sample. Six were in their first pre-practicum experience, 22 in their second pre-practicum experience, and six in their third pre-practicum experience. The sample was 87.9% female and 12.1% male, making the sample fairly representative of the population of the school of education in terms of gender. In the sample, 84.9% of the TCs identified as White, 9% as Latino/a,

and 6% as Asian. There were three TCs who named a language other than English as their first language. Two TCs listed as Spanish as their first language, while another TC listed Korean. This sample population of TCs at Edmond University reflects the predominantly white, female, monolingual teacher population of the United States (United States Department of Education, 2013). Of the 33 TCs, 22 were aspiring English teachers. There were six history TCs, two math TCs, one Spanish TC, one Latin TC, and one biology TC.

The smaller sample of eight TCs met the criteria set for selection of the smaller sample. All levels of pre-practicum experiences were represented, and TCs from as many different content areas as possible were included. Demographic information for the eight TCs in the smaller sample is presented in Table 3.1.

Table 3.1 Demographic Information for TCs in the Smaller Sample

Name	Gender	L1	Fieldwork Experiences	Content Area	Placement Context
Rose	F	English	1	Biology	Urban public high school
Liana	F	Spanish	1	English	Urban public high school
Jill	F	English	2	History	Suburban public high school
Becca	F	English	2	English	Urban Catholic middle school
Carly	F	English	2	English	Suburban public high school
Lucas	M	English	3	History	Suburban public high school
Hunter	M	English	3	History	Suburban public high school
Felix	M	English	3	History	Suburban public high school

Placement contexts. The eight TCs in the smaller sample were placed at five different schools near the university for their pre-practicum experiences. These schools varied in terms of the size and the cultural and linguistic diversity of the student population. Data about the student populations of the public schools was gathered from the state department of education's website. The percentage of students who were considered First Language Not English (FLNE) and the percentage of students in the school identified as ELL both are included in this section. It is important to note that all ELL students are also counted in the population of FLNE students.

Rose and Liana were placed at the urban high school where all secondary TCs complete their first field experience. This school was the most linguistically diverse of the placement sites. Approximately 60% of the students in the school were reported to be First Language not English (FLNE), and 40% of the students were classified as ELL.

Jill, Lucas, Felix, and Carly were placed at diverse suburban high schools. Jill and Lucas were placed at the same school, located in a town that has seen a recent influx of immigrants from Central America. Latino students comprised 34% of the student body at the high school. The high school population included 39.4% FLNE students with 11.7% of the student body classified as ELL students. Felix and Carly were placed at a high school in a suburb with a large Asian population. Asian students accounted for 54.3% of the population of this high school. Student classified as FLNE accounted for 47.2% of the student body, and 12.3% of students were classified as ELL.

Hunter was placed at a large public high school located in a wealthy suburb. This school had the least linguistically diverse population. Approximately 7% of the students

in the high school were classified as FLNE, and ELL students accounted for less than 1% of the student population.

Becca was the only TC in the smaller sample who was placed in a middle school classroom. She was also the only TC not placed in a public school. The school in which she observed and taught was a large Catholic school in an urban area, serving boys in grades 7 to 12. The school did not provide statistics regarding the linguistic diversity of its student body. Approximately 87% of students at the school identified as White and 13% of students identified as African-American/Black, Asian, or two or more races/ethnicities.

The Intervention: Learning to Identify and Teach Features of Academic English

The intervention studied in this research was the mandatory training session for all secondary TCs who were planning to complete a pre-practicum experience in Fall 2014. A detailed description of the training is provided in Appendix A. In this training session, TCs were taught to identify the features of AE present in their content area lessons through the use of a lesson planning worksheet. TCs were instructed to bring a lesson plan which they have previously planned and taught with them to the training session. For the TCs in their second and third experiences, this training was delivered as a two-hour session in September 2014. For the TCs in their first experience, the training described in this section was the fourth and final session in a series of trainings; the session was held in November 2014. This training session was provided later in the semester so that the TCs in their first placement experience would have already planned and taught one lesson that they could bring to the training.

Before I began each training session, all TCs in attendance were asked to complete a pre-test (see Appendix B); TCs in their first experience completed this pre-test at the start of the first training session of the semester. The first section of the pre-test asked TCs to provide demographic information, including the content area they teach, first language, number of previous pre-practicum experiences, and if they had taken/were taking the required course on teaching bilingual learners. The second section provided them with definitions and explanations of the terms *language function* and *language features*. The third section of the pre-test consisted of three scenarios. For each scenario, the TCs were asked to name the language function of the writing task and then determine the language features students should use.

When the TCs had completed the pre-test, then I began the training session. The training session began with a brief presentation. All TCs were informed that they would need to submit a lesson plan and a lesson planning worksheet, which they would learn how to complete during the training session, by the end of the semester as a requirement of their fieldwork experience. Then, in the first segment of the training, TCs were taught about the concept of register in general and the register of AE specifically. The TCs engaged in an activity designed to illustrate their knowledge of multiple registers of language. I then gave a brief PowerPoint presentation in which I defined the concept of register, explained that AE is the register expected and valued in school, and presented the word, sentence, and discourse-level features of the register of AE as described by the WIDA Consortium (2012). The features of AE listed in the WIDA documents are similar to those features described by Scarcella (2003), including technical and general academic vocabulary, sentence structures, grammatical constructions, and text types and structures.

In the second segment of the training, I modeled the process of using the lesson planning worksheet, which was designed as a scaffold for TCs to identify the functions and features of AE that they would need to teach to students (Appendix C), and the TCs practiced each step of the process as I modeled it. I modeled for the TCs how to use the worksheet to identify the features of AE that students should be taught to use or understand in order to access the content or complete the activities of the lesson plan. I provided TCs with a copy of the lesson planning worksheet and a sample high school chemistry lesson plan. I modeled how to complete each section of the lesson planning worksheet using the sample lesson plan. After I modeled each section, the TCs completed the same section of the lesson planning worksheet using the lesson plan they brought. In the first step, TCs classified each instance in which students are asked to use or understand AE in the lesson plan as a listening, speaking, reading, and/or writing demand. Then they decided on the two most important language demands in the lesson. They determined the language functions (such as *explain*, *describe*, *define*, and *compare*) and required word, sentence, and discourse-level features of those two demands. TCs were reminded that they were required to complete one lesson planning worksheet, which they would use to identify the features of AE that they could teach to students in one lesson plan that they created during the semester in their fieldwork placement.

In the final segment of the training, I demonstrated for TCs how to incorporate the teaching of features of AE into their lesson plans. TCs are taught to implement two of the features of the SIOP model, creating language objectives and designing instruction that supports those objectives (Echevarría et al., 2008). Features from the SIOP model were chosen as a way to help TCs plan and teach features of AE because it is taught in the

required course on teaching bilingual students. These two specific features were chosen because they are, as Staples and Levine (2014) described, "high leverage" in that they are clearly related to the content of the training, naming and teaching features of AE. First, I modeled for TCs how to write language objectives for the language demands they had chosen. I used a language objective format in which specific features of AE that students would be expected to use or understand are listed at the end of the objective (see Appendix A). Then I helped the TCs designate a place in the lesson where they would teach students how to use the language features that were named in the language objective. The TCs were instructed that they should be creating language objectives that include features of AE and that they should describe how they will teach those features of AE in the lesson procedure section of the lesson plans they create during the semester in their fieldwork placements. I reminded them that they would submit one lesson plan from their pre-practicum experience to me by the end of the semester, along with the lesson planning worksheet that they used to identify the features of AE present in the tasks and texts of that lesson. At the end of the training session, I handed out consent forms and sought TCs' participation in this research.

Data Sources and Analysis

The research was conducted in two phases. In the first phase, several data sources were collected from all 33 TCs who agreed to participate in the research. In the second phase, additional data sources were collected from the eight TCs in the smaller sample. In this section, I will describe the data collection and analysis enacted in each of the two phases of the research.

Phase 1: Data Collection. In order to discover what TCs learned about identifying features of AE and incorporating features of AE into lesson plans from the intervention, I collected four data sources from all 33 TCs: a pre-test, a post-test, a lesson plan, and a lesson planning worksheet. These data sources are shown in Table 3.2.

Table 3.2.

Ouantitative Data Sources Collected from the Larger Sample of TCs

Data Source	Frequency	Total
Pre-test	1 per TC	33
Post-test	1 per TC	33
Lesson plan	1 per TC	31 ^a
Lesson planning worksheet	1 per TC	31 ^a

^a Three of the TCs planned and taught their lesson as a group, which is common practice among TCs in their first pre-practicum experience at this university. These three TCs submitted one lesson planning worksheet and one lesson plan. For this reason, there are 31 lesson planning worksheets and 31 lesson plans, instead of 33.

In order to compare TCs' identifications of features of AE from before and after they attended the training session, I collected a pre-test and a post-test. All of the TCs had submitted a pre-test at the training session. I emailed the post-test to the 33 TCs who had agreed to participate in the research in the beginning of December (see Appendix B). The post-test was structured in the same way as the pre-test, but the content was slightly different. TCs were asked to name the same number of language functions and features, but the features differed slightly from those described on the pre-test. For example, in one scenario on the pre-test, students were asked to label the parts of a cell on a worksheet in

a science lesson, but, on the post-test, students were asked to label excerpts of poems with the names of literary devices. In both scenarios, students were being required to use technical vocabulary but the actual words students would use were different.

In order to examine the effect of the training on TCs' use of the lesson planning worksheet to identify features of AE and then incorporate them into their lesson plans, the 33 TCs who participated in this research were asked to submit one lesson plan that they created during the Fall 2014 semester along with the completed lesson planning worksheet that they had used to identify the features of AE present in that lesson plan. TCs were asked to upload their completed post-test, their lesson plan, and their lesson planning worksheet by the end of December 2014 to a site on an online learning management system created specifically for this research.

Phase 1: Data Analysis. The purpose for collecting the four data sources listed in the previous section was to determine what TCs identified in terms of features of AE and to what extent they incorporated those features of AE into their lesson plans after they attended the training session. First, TCs made an extremely large number of identifications on the pre-test, post-test, lesson planning worksheet, and lesson plan. I needed to devise a way of organizing these identifications in a way that would help me to make sense of what TCs had learned about AE and what they might still find challenging.

As I examined what TCs included on these documents, I noticed that there were different types of identifications. Some of the identifications that TCs made were names or descriptions of features of AE which matched the description of the term "language feature" provided on the pre-test and post-test. Language features were described as "vocabulary words and phrases", "sentence structures (simple, compound, complex) and

other grammatical features (such as verb tense, prepositional phrases, passive voice)", and "the amount of language students need to use and the structure of language (e.g. a four-step procedure, a bulleted list, a paragraph with a topic sentence, three details, and a concluding sentence)". These names or descriptions of features of AE that TCs included could then be further distinguished into specific and non-specific categories. In specific identifications, features were named or described in a way that demonstrated that the TCs could identify what the language feature looked like, such as, "Tier 3 words: asyndeton, metonymy, polyptoton, alliteration, elision, anaphora". An identification that said only "Tier 3 words" was not considered specific. Although the identification "Tier 3 words" did demonstrate that a TC understood the concept of "language feature", it did not specifically name an actual feature of AE. TCs also included identifications that were not names or descriptions of features, which I categorized as "not features of AE".

By sorting TCs' identifications into the categories of specific features, non-specific features, and not features of AE, I was able to organize a large amount of data. This organizational scheme allowed me to both count the number of identifications of features of AE that TCs made and describe the types of features that TCs identified. Also, in categorizing the identifications in this way, patterns could be discerned in terms of the identifications that TCs made which were not features of AE, patterns which might be helpful in determining what TCs found challenging about identifying features of AE. In Figure 3.2, a visual model is shown to demonstrate how the identifications were sorted into the three categories.

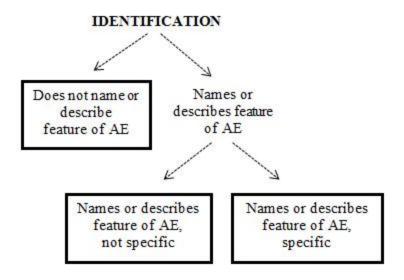


Figure 3.2. Visual model of the process for categorizing identifications.

On the pre-test, post-test, and worksheet, TCs were asked to classify their identifications as word, sentence, or discourse level features of AE. For this reason, identifications of specific features of AE on these documents were also evaluated as to whether they were listed correctly as word, sentence, or discourse level features. As explained on the pre-test and post-test, words and phrases were word level features, sentence structures and grammatical constructions were sentence level features, and descriptions of amount or structure of language to be used were discourse level features.

I designed two documents on which to record the categorization of the identifications. To assess TCs' identifications of features of AE on the pre-test and post-test, I designed scoring guides. Figure 3.3 shows the scoring guides used to score the sections in which TCs' named features of AE on the pre-test and the post-test. There is a category on the scoring guide in which to mark any identification that TCs should have made but did not. Any identifications that TCs made on the pre-test or post-test that were

not names or descriptions of features were recorded in a blank space below the scoring guide. I field tested the pre-test scoring guide using the pre-tests of TCs who had chosen not to participate in the research. One TC's post-test and a completed scoring guide are included in Appendix D to illustrate how the scoring guide was used.

PRE-TEST	Not identified	Identified, incorrect	Identified at correct level
		level	2
Calanaa Vaaahulami	0	1	2
Science Vocabulary	ļ.,,		
Similar/Different			
Paragraph			
Topic Sentence			
Compound Sentences			
Sequence Words			
Math Vocabulary		l-	

POST-TEST	Not identified	Identified, incorrect level	Identified at correct level
	0	1	2
6 Sentences			
Complete Sentences			
Frame w/Passive Voice			
Science Vocabulary			
Literary Devices			
8 Sentence Paragraph			
Connectors			
Semi-Colon +however			

Figure 3.3. Scoring guides for the pre-test and post-test.

Evaluating the lesson planning worksheets and lesson plans that TCs submitted was a bit more complex than evaluating the pre-tests and post-test, because, unlike on the

pre-test and post-test, I could not predict which features of AE TCs might name or how many features TCs might name on the worksheets or incorporate into their lesson plans. I created a recording sheet on which the identifications that TCs made on the lesson planning worksheet and the lesson plan could be documented. On these sheets, there were spaces to record exactly what TCs wrote on these documents as well as charts in which the number of identifications they made could be recorded. The charts had separate spaces for identifications made at the word, sentence, and discourse level. On the worksheets and lesson plans, a set or list of identifications of the same type of feature was counted as one identification. This procedure was followed in order to maintain consistency in counting identifications across documents, as groups or sets of features were counted as one identification on the pre-test and post-test (e.g. photosynthesis, decompose, atmosphere, and fossil fuels were all counted as one identification, called "science vocabulary"). In Figure 3.4, a section from the recording sheet used to document identifications from the worksheet and a section used to document identifications from the lesson plan are shown. The sections used with the worksheet needed to include space for identifications of specific language features that were classified correctly and incorrectly. Appendix D includes one completed example of each section of the recording sheet to illustrate how these sections were used to organize identifications that TCs made on the lesson planning worksheet and the lesson plan.

WORKSHEET	Not specific / Unrelated	Specific ID at incorrect level	Specific ID at correct level	Comment
Word				
Sentence				
Discourse				
Total				
LESSON PLAN		Not specific / Unrelated	Specific ID	Comment
Word				
Sentence				
Discourse				
Total	-			

Figure 3.4. The recording sheet.

Using the recording sheet also allowed me to determine the extent to which TCs incorporated features of AE into their lesson plan. TCs had been instructed in the training session to name specific features of AE in the language objective(s) and then describe how they would teach those features to students in the lesson procedure section. If, in a

lesson plan, a TC had named specific features of AE, I noted on the recording sheet if the TC included the features of AE in the language objective(s), in the lesson procedure section, or both. I was then able to sort the lesson plans into groups based on the extent to which features of AE were incorporated into the lesson plan.

Since TCs were asked to supply their own identifications, the TCs' responses on the pre-test, post-test, lesson planning worksheet, and lesson plan varied greatly in wording and specificity, leaving room for judgment in terms of categorizing these identifications. I employed a second rater to work with me in evaluating these documents. The second rater was a fellow doctoral student with a background in linguistics and some familiarity with the concept of AE from her experience both as a research assistant and as a grader for the teaching CLD students course. We met three times, once to score the pretests, once to score the post-tests, and once to evaluate the lesson planning worksheets and lesson plans. At each meeting, we followed the same procedure. We reviewed the criteria used to categorize identifications, and then we used the criteria to evaluate the identifications on one document together. We discussed what features the TC named in the identification, in what category we would place the identification, and for what reason we would categorize it in that way. Once we were in agreement on the scoring of that document, we would then fill out the scoring guide or recording sheet for that document. Then we would evaluate a set number of documents independently and stop to compare categorizations when we finished. Discrepancies in categorization were discussed, and, for each discrepancy, we explained our reasons for placing the identification in that category. We discussed previous decisions regarding categorization and referred back to

the explanations from the pre-test and post-test to help us in coming to consensus on a category.

When we had evaluated the identifications on all documents, I calculated the scores on the scoring guides and counted up the numbers of types of identifications on the recording sheets. I entered the numerical data from the scoring guides and recording sheets, along with the demographic information for all participants, into statistical analysis software. I used the software to calculate descriptive statistics and conduct statistical analyses of the data.

Phase 2: Data Collection. In order to gather in-depth data on how TCs planned and taught lessons in their fieldwork placements, I observed each of the eight TCs in the smaller sample teaching one lesson, and I interviewed the TCs after they each taught their lesson. The data from these sources were integrated with the identifications of features of AE each of these TCs made on their lesson planning worksheets and incorporated into their lesson plans to present a complete picture of not only what each TC identified as features of AE but also how each TC incorporated features of AE into their lesson plan and their implementation of that lesson plan at their fieldwork placement sites.

All TCs in the smaller sample consented to be observed teaching one lesson in their placement classroom in October or November 2014. The TCs were asked to submit via email the lesson plan for this lesson the night before they taught it. I attended and digitally recorded seven of the eight lessons. I was unable to be present during the teaching of one TC's lesson, because several TCs were teaching at the same time on the same day at different placement sites. For that reason, one TC recorded his own lesson using a digital recorder I gave to him. He returned the digital recorder to me at the end of

the school day. I transcribed the recordings of the eight observed lessons before I interviewed each TC so that I could refer to events in the lesson during the interview.

Each TC sat for an interview as soon after he/she taught the observed lesson as possible. The length of time between the teaching of the observed lesson and the interview varied from 24 hours to four days. Although the interview questions were revised before each interview so that I could ask TCs about their specific lesson plan and implementation of that plan, a basic interview protocol was designed, which was then altered to refer to specific events in the lesson plan and implementation of that plan in the classroom (see Appendix E). The interviews were digitally recorded. I transcribed the eight interviews after they were conducted.

In the first part of the interview, I asked TCs to engage in a think aloud. The think aloud was utilized as a way to illustrate how TCs verbalized the process of identifying the academic language present in their content area lessons and how they might apply their knowledge about academic language as they plan. The think aloud in which TCs engaged was an example of "retrospective verbalization", in which a researcher "probes the subject for information after the completion of the task-induced processes" (Ericsson & Simon, 1980, p. 220). This think aloud process asked them to recall and explain a process they have already completed, the process of planning the lesson they taught. The TCs were given copies of the lesson plan and the lesson planning worksheet they submitted to refer to during the think aloud. In the second part of the interview, the TCs were asked questions about the lesson they taught. I asked TCs for clarification or explanation of any instances in which they discussed features of AE with students. TCs were encouraged to bring with them to the interview any student work which they had collected and which

might help them to explain how they assessed student learning of the features of AE taught in the lesson. In the third section of the interview, TCs engaged in reflection on what they learned from the training sessions. I asked them to discuss what they believed to be the reason(s) for identifying and teaching AE in content area lessons and to reflect on the process of identifying and teaching the features of AE.

Phase 2: Data Analysis. I used a constructivist grounded theory approach to code the transcripts of the observed lessons and interviews of the TCs in the smaller sample (Charmaz, 2000). In analyzing these data sources, it was my goal to discover how the TCs described their approaches to the process of identifying and teaching AE in actual lessons that they created and taught. Grounded theory was used to conduct the analysis of the lessons and interviews because, according to Charmaz (2006), the use of grounded theory "reduce[s] the likelihood that researchers merely superimpose their preconceived notions on the data" (p. 51). I wanted to, as much as possible, present what TCs said, did and thought to provide an explanation of their lesson planning and teaching processes. I coded using gerunds whenever possible in order to, as Charmaz (2006) wrote, "gain a strong sense of action and sequence", which might help me to better describe TCs' lesson planning and teaching process (p. 49). I coded the transcripts of the lessons and the interviews using N-Vivo qualitative data analysis software.

As I described previously, the interviews included questions about and references to events in the lesson that the TCs taught. I needed to code the transcript of the lesson before I could interview the TC who taught the lesson, so the coding process began with the lessons. After I observed each lesson, I transcribed it. As I transcribed the first lesson, I realized that the nature of lessons would require a different way of coding than the

interviews, as the lessons were structured as a series of events, as opposed to TCs' descriptions of or reflections on processes and actions in the interview. Charmaz (2006) suggested "[t]o gain analytic insights from observations of routine actions in ordinary setting, first compare and code similar events" (p. 53). Therefore, I chose to code incident to incident in the lessons, using codes such as "explaining one section of the graphic organizer", "introducing video", and "answering student's question about *militia*". The entirety of each incident was marked with one code, keeping what was said and done in reference to that incident together for analysis purposes. Engaging in this type of coding allowed me to locate events in the lesson in which language was discussed and to examine what both the TC and students said and did in each event, so that I could ask TCs about these events in their interviews.

Once I had completed the interviews, I transcribed them. I then engaged in line by line coding of the interview transcripts. I tried whenever possible to use TCs' own words as the codes. These codes included "adding language objective after writing lesson plan", "might not always be a word level feature", "naming functions and features is harder", "never gotten feedback from supervisor about language", "thinking about the words I'm saying", and "seeing academic language is an additive-type thing". With all of the documents coded, I began to compare the codes. I examined and compared codes within each case first, looking at each TC's lesson and interview. I first wanted to get a sense of the TCs' full experience of planning and teaching and how he/she chose to describe this experience. After I had done this, I began the focused coding phase (Charmaz, 2006). Using the qualitative data analysis software, I compiled a complete list of action codes from the lesson and the interviews, along with the excerpts to which they were assigned.

From these action codes, I was able to get a sense of the processes in which TCs engaged as they planned and taught lessons as well as the factors that influenced those processes. The different aspects of the process and the influential factors TCs discussed became my selective codes. These selective codes included "writing language objectives", "incorporating supervisor feedback on academic language", "knowing students speak another language", and "defining vocabulary words".

At this point in the process, I began memo writing (Charmaz, 2000). When I noticed a theme emerging in the data, I would write a memo exploring what I had found and how it related to my larger question about TCs' planning and teaching of lessons. In writing these memos, I was able to see how I could explain these themes in my writing. After exploring the data and writing in this way, I began to sort the selective codes into categories. I grouped the codes into three big categories: "planning", "teaching", and "assessing student learning". These categories helped me to explain the process that TCs were enacting as they planned and taught their lessons and allowed for the inclusion of TCs' reflections on the process and on students' learning of AE in their lessons.

After engaging in memo writing and grouping the selective codes into larger categories, I saw that the TCs' experiences of planning and teaching were shaped so significantly by the factors and influences in their own situations that, in order to fully describe how each one planned and taught the lesson, it would be best to present each TC's experience separately. Since I wanted to be sure that all aspects of each TC's experience were included, instead of describing the common themes emerging from the data, I created eight descriptions, one of each TC's planning and teaching of his/her lesson. I integrated data from the lesson planning worksheet, lesson plan, observed

lesson, and the interview into these descriptions. The identifications of features of AE TCs made on the lesson planning worksheet, any features they incorporated into their lesson plans, the actual events of the lesson, and the TCs' reflection on and explanation of their planning and teaching process were brought together to create a detailed description of how each TC identified features of AE and made choices related to including these features in their planning and teaching of content area lessons.

Validity and Reliability of the Research

It is the responsibility of the researcher to determine "the accuracy and credibility of the findings" throughout the process of collecting and analyzing data (Creswell, 2008, p. 266). As this research study employed multiple data collection and data analysis methods, there were several strategies used in order to ensure that the findings of this research could be considered both accurate and credible. The selection of the participant sample and the analysis of the pre-test and post-test data were designed to minimize threats to internal validity. Several different types of triangulation were employed in the quantitative and qualitative data collection and analysis phases.

The use of a pre-test/post-test design necessitated that maturation and history, two threats to internal validity, be considered when both selecting the population and analyzing the data. Although neither of these threats is thought to be a major concern in a study that takes place over a short period of time, as this research did, it was important for me to design a study in which the effects of the training could be disentangled from the possible effects of other events in the participants' experiences. Cohen, Manion, and Morrison (2007) explained maturation thusly: "Between any two observations subjects change in a variety of ways. Such changes can produce differences that are independent

of the experimental treatments" (p. 155). Selecting participants from all three levels of experience (first, second and third pre-practicum placement) allowed for "participants who mature or develop in a similar way" to be included in the sample (Creswell, 2008, p. 308). By including participants at various stages in the teacher education program, I was able to compare performance on the pre-test and post-test across groups. In doing so, it was possible to determine whether effects might have been related to maturation or to the training the TCs attended.

Another threat to internal validity, according to Cohen et al. (2007) is history, "events other than the experimental treatments" (p. 155). These events must also be considered when analyzing data in a pre-test/post-test research design. When the TCs' completed the first section of the pre-test, they indicated whether they had taken, were taking, or had not yet taken the required course on teaching CLD students. Completing that course, in which features of AE are also discussed, might have an impact on the TCs' development of knowledge about language or their incorporation of that knowledge into their lesson planning and teaching. The TCs' history in regards to their previous coursework on the topic was used in the data analysis phase as a grouping variable in order to determine if this event had any impact on how TCs' developed knowledge about language and the ability to plan and teach lessons that included language.

Triangulation was employed throughout the data collection and analysis phases of this research. According to Lancy (1993), for a researcher, the "most effective defense against the charge of being subjective is to buttress what she has observed with material that reinforces these observations from other semi-independent sources" (p. 20).

Triangulation is a method for supporting the researcher's findings and inferences using

evidence from other sources. In Creswell's (2008) definition of triangulation, that reinforcement of observations may be built through "corroborating evidence from different individuals (e.g. a principal and student), types of data (e.g. observational fieldnotes and interviews), or methods of data collection" (p. 266). In this study, I created a research design which allowed me to collect corroborating evidence in all three of these ways.

Although Creswell's (2008) explanation of triangulation referred to gathering evidence from different individuals who were participants in the research, triangulation may also involve gathering evidence from multiple observers, which is known as investigator triangulation (Denzin, 1970; Cohen et al., 2007). In this research design, investigator triangulation was employed in the categorization of the identifications that TCs made on the pre-tests, post-tests, lesson plans, and lesson planning worksheets. As noted above, I worked with a second rater so that both of our interpretations of the identifications that TCs made could be considered and discussed as we made decisions regarding the categorization of those identifications. Employing a second rater offered another perspective on how the identifications should be categorized, which helped me to guard against the subjectivity that comes with having designed and delivered the trainings. Our discussions about the identifications forced me to closely examine the data I had collected and to provide explanations for the decisions I was making. The second rater's presence prevented me from imposing only my viewpoint of what "correct" answers would look like. Working as a team allowed us to engage in a conscious and deliberate analysis of the data which involved explaining our decisions to one another and recording the rationale for our choices to ensure consistency in our categorizations.

As described in the section on the mixed methods design of this study, determining the effects of the training should include examining both what TCs identify as features of AE and how they identify and teach those features. Gathering data on both of these aspects required collecting both quantitative and qualitative data. Additionally, several different types of quantitative and qualitative data were collected from TCs. The quantitative data sources were the two tests, pre and post, plus the artifacts created by the TCs, the lesson plan and the lesson planning worksheet. All four of these data sources were collected in order to provide evidence of what TCs learned about features of AE from the training. The qualitative data included observational data, in the form of the lesson that I watched or heard the TCs teach, and an interview. The data from these two sources were combined for the purpose of explaining TCs' planning and teaching process. Also, in analyzing the qualitative data sources from the smaller sample, two of the quantitative data sources, the worksheet and the lesson plan, were included in order to create a complete description of the TCs' planning and teaching of the lesson. The research design provided opportunities to collect data from different sources using different methods in order to gather corroborating evidence that I could use to support my findings from this study.

Researcher Positionality

As a researcher, I came to this study with experiences and beliefs that need to be acknowledged. I taught ELL students in a sheltered classroom in a public school district for four years and worked as a coach in that same district for an additional four years.

These experiences have shaped my belief that CLD students can and should learn gradelevel content and Academic English at the same time. This type of instruction can only be

implemented by teachers trained to plan and teach both the content and the language of their discipline. It is the responsibility of teacher education programs to prepare all teachers to deliver this type of instruction.

I designed the training being studied in this dissertation and served as the facilitator of all sessions. I have used the method I taught in the training session for many years, both in these training sessions and professional development sessions with my colleagues in the public schools, as a way to help mainstream teachers identify and teach the AE present in their lessons. Over time, I have adjusted and refined the training based on other studies, both formal and informal, of the impact on students. While I believe that this method of identifying and teaching functions and features of AE is effective, in one of the studies I conducted with secondary TCs who attended a series of training sessions on identifying the AE present in content area textbooks, I found that, although the TCs gained knowledge about AE from those trainings, they were not able to articulate how or why they might apply that knowledge to their teaching practice. While I know that the training may help TCs to develop this knowledge, my previous findings have helped me to understand that there need to be other supports in place in the teacher education program to prepare TCs to not only identify features of AE but also plan and implement lessons that include instruction in AE.

As the facilitator of these training sessions and the instructor of the required course on teaching CLD students in several previous semesters, I had worked with many of the secondary TCs in the sample population prior to their participation in the research. I believe that both the training and the course are important parts of the effort to prepare TCs to identify and teach features of AE. I want all of the TCs I work with to be

successful in identifying and teaching features of AE. However, it was important that I did not let my desire to see these TCs succeed influence how I analyzed the data I collected. For this reason, I anonymized all of the data as soon as it was collected, and TCs in the sample populations were referred to by numbers or pseudonyms instead of names.

In order to mitigate the effect my own biases and beliefs might have on my analysis of the data I collected, I carefully documented the data analysis processes in which I engaged. I kept a record of the process of categorizing the identifications so that I could be certain that our decisions were agreed upon and consistent across data sources. Using qualitative data analysis software allowed me to keep a record of my coding process, as the codes I applied were saved and easily accessible. Having this record of the coding I had done provided me with the opportunity to reflect on how I was interpreting what I found in the data.

CHAPTER 4-WHAT TEACHER CANDIDATES LEARNED ABOUT IDENTIFYING AND PLANNING TO TEACH FEATURES OF ACADEMIC ENGLISH

In this chapter, the impact of the intervention on TCs' ability to identify features of AE, the first subdomain of DLK, will be discussed. The training session was designed to develop the TCs' ability to identify linguistic demand, as measured by their naming of word, sentence, and discourse level features of AE present in the texts and activities of content area lessons. Also, in the training, TCs were taught to incorporate teaching or modeling of these features into lesson plans by creating language objectives in which they included the specific language features they would teach and designing instruction to support those objectives.

I begin this chapter with descriptions and examples of the types of identifications that TCs made on the post-tests, worksheets, and lesson plans, the documents they submitted after they had completed the training. I also report the outcomes of statistical analyses of the TCs' pre-test and post-test scores to demonstrate the impact that the training had on TCs' identification of features of AE. In the second section, the extent to which TCs incorporated features of AE into their lesson plans is discussed.

What Teacher Candidates Learned about Identifying Features of Academic English

On the post-tests, lesson planning worksheets, and lesson plans, the 33 TCs included a total of 441 identifications in the sections in which they were asked to name features of AE. There was no specified total number of features that TCs should have named, since I could not predict how many features of AE they would identify on their lesson planning worksheets and lesson plans. The identifications were grouped into three categories. In the first category were specific names or descriptions of features of AE. In

the second category were references to types or groups of language features that were not specific, such as "vocabulary from the text" and "a range of sentence patterns".

Identifications that were not considered to be features of AE were grouped into a third category. These identifications included names of activities, like "discuss with a partner", and references to higher order thinking skills, such as "organize ideas". Figure 4.1 shows the percentage of identifications that fell into each category on the post-tests, worksheets, and lesson plans.

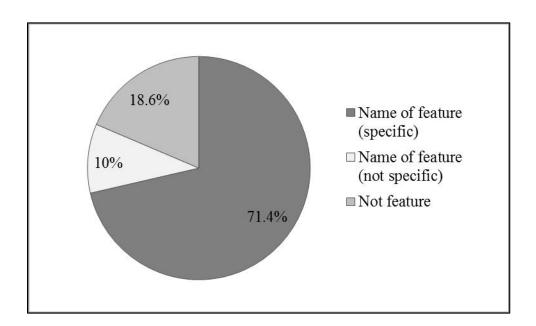


Figure 4.1. Identifications made by TCs in each category.

The majority of the identifications that TCs made on the post-tests, worksheets, and lesson plans were names or descriptions of specific features of AE. Of these identifications, nearly half were names or descriptions of word level features. Figure 4.2 shows the percentage of specific features TCs named and correctly classified at the word, sentence, and discourse level.

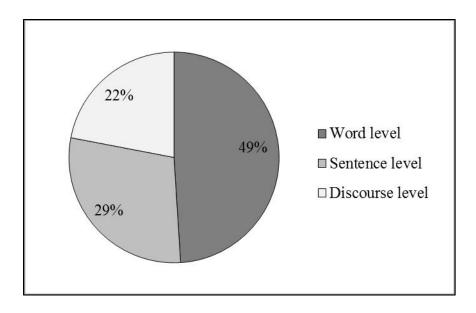


Figure 4.2. Percentage of specific features that TCs named at each level.

The percentage of sentence level features was slightly greater than the percentage of discourse level features. However, TCs named nearly double the percentage of word level features as either sentence or discourse level features. Descriptions and examples of the types of features TCs named at the word, sentence, and discourse level will be presented to illustrate what TCs identified on the post-tests, worksheets, and lesson plans.

Word Level Features

As they were instructed in the training, TCs named both technical and general academic vocabulary words on the post-tests, worksheets, and lesson plans. Technical vocabulary was defined as words or phrases that were related to the content area topic of a lesson or activity (Scarcella, 2003). There was great variety in terms of the content-specific vocabulary words and phrases listed on the worksheets and lesson plans. English TCs named technical vocabulary which they found in the texts that students would read, including the antiquated pronouns and expressions used in Shakespearean texts and the

use of dialect, reflected in words like *feller*, in a short story by Mark Twain. Additionally, English TCs named vocabulary words that would be essential in making sense of texts that would be read, words like *theme*, *characterization*, *simile*, and *infer*. Technical vocabulary named by history TCs included *bootlegger* and *gangster* for a lesson on Prohibition and *memorandum* for a lesson on President Lincoln's decision regarding Fort Sumter. In math, the technical vocabulary named were terms such as *recursive formula*, *explicit formula*, *polynomial*, and *zero remainder*.

TCs also named specific words and phrases that would be considered general academic vocabulary; these words and phrases were not related to the topic of the lesson but could be used across content areas to accomplish a specific language function (Scarcella, 2003). Several TCs named words or phrases that would be used in comparisons, including, "verb phrases of comparison (*is similar to* and *reminds me of*)" and the words *similar* and *different*. For tasks in which students would present evidence to support a claim, TCs named phrases like *for example* or "verbs like *shows*, *demonstrates*, and *proves*". A math TC who wanted students to write a procedure named the words *next* and *then* as necessary words for students to use to show sequence. Table 4.1 shows the percentage of each type of word level feature named on the post-tests, worksheets, lesson plans.

Table 4.1

Specific Word Level Features of Each Type Identified

Type of Feature	Post-test	Worksheet	Lesson Plan
Technical vocabulary	67%	68.4%	73.3%
General academic vocabulary	33%	31.6%	26.7%

On the post-test, TCs were asked to name two technical vocabulary features and one general academic vocabulary feature. TCs had a 94.9% success rate in terms of naming and classifying the word level features on the post-test. The pattern of naming more technical than general academic vocabulary continued on to the worksheets and the lesson plans. TCs named twice as much technical as general academic vocabulary on the worksheets and nearly three times as much in the lesson plan.

Sentence Level Features

TCs named four types of specific features at the sentence level. On the post-test, there were two sentence level features, one sentence frame and one description of sentence construction. On the worksheets and lessons plans, TCs identified sentence frames or sentence starters that students would be required to use in speaking or writing tasks. Some TCs provided simple starters, like *I believe* or *I think* for students to use to express an opinion. Other TCs provided students with frames that would require them to provide evidence or an explanation, like "I think ____ because ____", "___ reminds me of ____ because ____", and "Mr. Rochester is a Byronic hero because ____". TCs also described how complete sentences should be constructed by using grammatical terms.

TCs' identifications of sentence structures varied from basic descriptions, like "a

complete, simple sentence", to more elaborate descriptions, such as "a thesis statement that is a compound or complex sentence in the present tense."

Two types of sentence level features that did not appear on the post-tests were named on the worksheets and in the lesson plans. On the worksheets and lesson plans, some TCs wrote "complete sentences" as a sentence level feature but did not describe the structure or grammatical features of the sentences. An identification of "complete sentences" was classified separately from those identifications that did include more description. Despite the fact that this identification was less specific than the descriptions of how sentences should be constructed, this identification could be a considered a specific language feature if the TC used it to inform students that their responses must be presented in complete sentences, as opposed to fragments or one-word responses. For this reason, the naming of "complete sentences" was classified as a specific sentence level feature. Another specific sentence level feature that was named was the use of quotation marks when quoting material from another source; this feature was mentioned on one worksheet. Table 4.2 shows the percentage of each type of sentence level feature named on the post-tests, worksheets, lesson plans.

Table 4.2

Specific Sentence Level Features of Each Type Identified

Type of Feature	Post-test	Worksheet	Lesson Plan
Sentence frames or starters	56.9%	46.4%	41.7%
Description of sentence construction	43.1%	32.1%	16.6%
Complete sentences, no description		17.9%	41.7%
Use of quotation marks		3.6%	

Sentences frames were named and correctly classified more frequently than the other sentence level features. As TCs began to use the identification "complete sentences" with no further description of grammatical structures on the worksheets, descriptions of sentence structures were included less frequently. In the lesson plans, "complete sentences" were named as often as sentence frames, while identifications in which TCs described the construction of sentences dropped significantly.

Discourse Level Features

TCs named two types of specific discourse level features, both of which had appeared on the post-test. One type of discourse level feature was the statement of an amount of sentences students would need to use in a speaking or writing task. On the worksheets and lesson plans, TCs specified that students would need to write "a five-sentence response", "3 to 4 complete sentences", and "1-2 sentences" in order to accomplish certain tasks. The other type of discourse level feature that TCs named was a description of the structure or the type of text that students would be asked to create. On the worksheets and lesson plans, some of the descriptions of text structure TCs made

included an amount of language, like "5 line dialogue" and "2 step procedure" and some, such as "a letter", did not. Other descriptions detailed the various structures that students should use when constructing written paragraphs. The descriptions of paragraph structures varied from very specific "five sentences: make a claim, give context, cite evidence, comment on evidence, connect to claim" to more general, "thesis statement, three examples to justify/defend, connection to 1920's culture/content knowledge". Table 4.3 shows the percentage of specific discourse level features of each type named by TCs.

Table 4.3

Specific Discourse Level Features of Each Type Identified

Type of Feature	Post-test	Worksheet	Lesson Plan
Amount of sentences	47.6%	60%	55.6%
Text structure/type	52.4%	40%	44.4%

On all three documents, the difference between the percentages of identifications of the two types of features was small. Statements of the amount of language were included more often on the worksheets and lesson plans than descriptions of the structure of a text. Unlike at the sentence level, the percentage of identifications of each type of feature at the discourse level remained fairly constant from the worksheets to the lesson plans.

Improvement in Identifications of Specific Features from Pre-Test to Post-Test

On both the pre-test and post-test, TCs received two points for each feature of AE they named and classified correctly and one point for each feature they named but

classified incorrectly. The highest score a TC could receive in this section was 14 points. The mean, median, and standard deviation for the scores on the features of AE section of the pre-test and the post-test are shown in Table 4.4.

Table 4.4

Descriptive Statistics for Scores in Features of AE Section

Task	N	Mean	Median	Std. Deviation
Pre-test	33	8.03	9	3.795
Post-test	33	11.42	12	2.873

A paired samples t test was performed on the scores from the section of the pretest and the post-test in which TCs were asked to name and classify features of AE. This test showed that there was a statistically significant difference between scores on the pretest and the post-test, t(32) = -4.884, p = .000. TCs correctly named and classified more specific language features on the post-test than they did on the pre-test.

Statistical analyses were also performed on the scores from this section of the post-test to determine if factors related to maturation or history might have affected these scores. The scores that TCs in their first, second, and third pre-practicum experiences received on this section of the post-test were compared. The mean, median, and standard deviation of the scores that TCs in their first, second, and third pre-practicum experiences (P1, P2, and P3) are shown in Table 4.5.

Table 4.5

Descriptive Statistics for Scores of TCs by Level of Fieldwork Experience

Level	N	Mean	Median	Std. Deviation
P1	6	9.17	11	4.021
P2	22	12.41	14	2.108
P3	5	9.80	8	2.490

The scores from the three groups were compared using an unequal variances F test. There was not a statistically significant difference found between the three groups [F (2, 7.27) = 3.484, p = .087]. When post-test scores were compared across number of previous pre-practicum experiences, there was no group of TCs whose performance on the post-test was markedly different from the other two groups. TCs who had completed multiple fieldwork experiences did not receive post-test scores that were significantly higher than TCs who had completed only one fieldwork experience.

To examine whether another factor, completing coursework related to teaching CLD students, may have had an impact on TCs' post-test scores, the scores of TCs who had taken the course were compared to the scores of TCs who had not. The mean, median, and standard deviation of the scores on the language features section on the post-test for the two groups are shown in Table 4.6.

Table 4.6

Descriptive Statistics for Scores of TCs by Course Completion

	N	Mean	Median	Std. Deviation
Course taken	15	12.33	12	1.988
Course not taken	18	10.67	11	3.308

An independent samples t test was used to compare the scores from the two groups. There was not a statistically significant difference found between the two groups $[t\,(31)=4.733,p=.098]$. TCs who had taken a course designed to prepare them to teach CLD students did not receive scores that were significantly higher than the scores received by TCs who had not yet taken the course. TCs were compared across one additional factor, the content area in which they taught. The scores of TCs who taught English were compared to those of TCs who taught other content areas, since it might be theorized that English TCs have more knowledge about language in general, which may translate to an increased ability to identify the language features of AE. The mean, median, and standard deviation of the scores on the language features section on the post-test for English TCs and TCs in other content areas are shown in Table 4.7.

Table 4.7

Descriptive Statistics for Scores of TCs by Content Area

	N	Mean	Median	Std. Deviation
English	22	11.50	12.5	3.248
Other content area	11	11.27	12	2.054

An independent samples t test was used to compare the scores from the two groups. There was not a statistically significant difference found between the two groups [t(31) = .211, p = .834]. TCs who taught English did not receive post-test scores that were significantly higher than the scores received by TCs who taught history, math, foreign language, or biology. While overall TCs received higher scores on the post-test than they did on the pre-test, the number of fieldwork experiences, the completion of a course on teaching CLD students, and the content area in which they taught did not seem to affect the scores that TCs received on this section of the post-test.

Challenges TCs Faced in Identifying Features of Academic English

The majority of the identifications that TCs made were names or descriptions of specific features of AE, and the number of correct identifications increased from pre-test to post-test. However, TCs did still include some identifications on the post-test, worksheet, and lesson plan that were not specific features of AE. These identifications that TCs made which were either not specific or not features of AE may illustrate the challenges that TCs faced as they attempted to identify features of AE in their content area lessons.

Naming features that were not specific. On all three documents, there were instances in which TCs named types or groups of features that were not specific. Word level features that were not considered specific, like "vocabulary from text", "key vocab appropriate to topic", "words that indicate their opinion", and "descriptive words" referred to both technical and general academic vocabulary. At the sentence level, these types of identifications included "complex grammar", "grammatical use of commas and periods", and "sentence stems", names that do not include any specific details about the

exact features that should be used. At the discourse level, TCs identified "parts of paragraph", "clear, orderly organization", "length of paragraph", and "parts of thesis statement" without providing more specificity as to the actual parts, organization, or amount of language that would be expected. TCs named more non-specific features at the word level than at the sentence and discourse levels combined. Although it is possible that TCs found it difficult to be specific when naming word level features, it is also possible that the greater number of non-specific identifications of word level features reflects TCs' tendency to identify more features at the word level overall.

Differentiating between features of Academic English and other aspects of lessons. In the sections where TCs were expected to name specific features of AE on the post-test and worksheet, some TCs identified other aspects of teaching and learning instead of, or in addition to, naming specific features of AE. According to how they were classified by the TCs, 63% of these identifications were made at the discourse level. In these identifications, TCs described what students would do with language, stated a purpose for using language, or named an aspect of the lesson not related to language at all.

The majority of these identifications were descriptions of what students would need to do with language. Descriptions of what students would do with language included names of activities, such as "speaking to the class", "completing a worksheet", and "discuss with a partner". Also included were strategies that students might use while reading, like "pick up on context clues". Finally, this category included many references to what students needed to do to successfully complete a writing task. TCs described what students would do in general ways, such as "arranging thoughts in writing" and

"proper analysis of quotes" and in more detailed ways, such as "how to properly quote the literary device".

The rest of these identifications were either statements of the purpose for using language or descriptions of aspects not related to features of AE. Statements of the purpose for using language were either the name of a language function or a description of a reason for using language. An identification like "persuasive writing" was placed into this category, because this statement of the purpose for writing, to persuade, does not include any description of language features that are used to persuade. On the post-tests and worksheets, TCs stated such purposes for using language as "defend their choice", "make an argument", and "explain answers". In identifications that named aspects of teaching and learning not related to features of AE, TCs either described the content of the lesson, as on the post-test when a TC identified "defining the function of each carbon form", or stated higher order thinking skills, like "draw conclusions", "differentiate ideas", and "analyze thoughts".

What Teacher Candidates Incorporated into Their Lesson Plans

In the training, TCs were taught not only to name and classify word, sentence, and discourse level features of AE but also to incorporate teaching of these features into their lesson plans. TCs were instructed to implement two of the features from the SIOP model (Echevarría et al., 2008); they were taught to create language objectives that included the names of specific features of AE that they identified in the texts, materials, and activities of the lessons they planned and to describe in the lesson procedure section how they would support these objectives by providing explicit instruction in the use of these features. If TCs both included specific features of AE in their language objective(s) and

described how they would teach at least one of those features to students, that lesson plan was considered to reflect full incorporation of what was taught in the training. Partial incorporation involved either including specific features of AE in the language objective(s) or describing how at least one feature of AE would be taught to students. If neither of these elements were present in a lesson plan, it reflected no incorporation of what was taught. Figure 4.3 shows a visual representation of the distribution of lesson plans across the three groups, full, partial, and no incorporation. Approximately two-thirds of the lesson plans submitted incorporated at least one of the two SIOP features that were taught in the training.

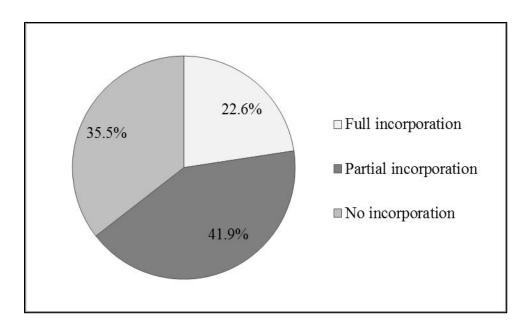


Figure 4.3. Lesson plans by extent of incorporation.

Lesson Plans with Full Incorporation

In the seven lesson plans with full incorporation, TCs named the feature(s) of AE they would teach in the language objective(s) and described how they would teach at

least one of those features of AE to students. For example, in an English lesson plan, the language objective stated that students would "describe a character's positive and negative traits by creating a thesis statement in groups using compound or complex sentences." In the lesson procedure section, this TC explained how she would teach students to construct complex sentences so that they could write strong thesis statements. She described how she would compare a thesis statement that is a simple sentence to one that is a complex sentence.

I will explain to students that this type of statement does not usually lend itself to a well developed thesis (such as the simple statement "Lenny's puppy is significant to the development of the story.") I will then write an example of a thesis with an independent clause and a dependent clause ("Since the puppy is soft and comforting, Lenny's attachment to it suggests that he is childlike and unprepared to face the harsh realities of the world."). I will explain to students that a complex sentence like this is more conducive to a strong thesis because it expresses a more complete thought and allows for more information, namely the larger significance to the novel.

As this TC did, the TCs who fully incorporated what they learned into their lesson plans described in the lesson procedure section how they would model or explain the expected features of AE. In four lesson plans, TCs stated that they would model for students how to use features of AE. For example, one TC planned a think aloud in which she would model how to create a five-line dialogue that included certain Shakespearean words and phrases. In the other three lesson plans, including the one described earlier in this paragraph, TCs described the sentence frames or sentence structures that they would

present and explain to students before assigning them a task which required the use of these frames or structures.

Lesson Plans with Partial Incorporation

In 13 lesson plans, TCs either included specific features of AE in their language objective(s) or described how they would teach a feature of AE. In 12 of the 13 lesson plans in this group, TCs named at least one specific feature of AE in the language objective(s) but did not describe how they would teach that feature to students. The features of AE named in the language objectives were mostly word level features. In eight of these twelve lesson plans, the language objectives included specified technical vocabulary words that students should use in writing or speaking.

There was one lesson plan in which a TC described how he would teach a feature of AE but did not name the feature in a language objective. A history TC explained in the lesson procedure section that he would engage students in brainstorming synonyms, antonyms, and examples of the word *alliance*, a technical vocabulary word used in his lesson. Neither the word *alliance* nor this vocabulary activity was mentioned in the language objective for this lesson; the language objective included no specific features of AE.

Comparing Incorporation across Groups of Teacher Candidates

In order to determine if the number of pre-practicum experiences affected the extent to which TCs incorporated what was taught in the training into their lesson plans, the percentage of lesson plans in which full, partial, or no incorporation were calculated for TCs who had completed one, two, or three pre-practicum experiences. Table 4.8

shows the percentage of lesson plans submitted by TCs at each level of pre-practicum experience (P1, P2, and P3) that reflected full, partial, and no incorporation.

Table 4.8

Lesson Plans by Level of Fieldwork Experience and Extent of Incorporation

	Full	Partial	No
Level	incorporation	incorporation	incorporation
P1	25%	50%	25%
P2	22.7%	40.9%	36.4%
P3	20%	40%	40%

Comparing these figures across the groups is difficult, as there were so few TCs in their first and third experiences, as compared to the large number of TCs in their second fieldwork placement. The percentage of lesson plans that reflected full incorporation was greater among TCs in their first and second pre-practicum experiences. TCs in their third pre-practicum experience had the highest percentage of lesson plans with no incorporation across the three groups.

Another factor which may have influenced the extent to which TCs incorporated the two SIOP features presented in the training was TCs' completion of the required course on teaching CLD students. Figure 4.4 shows the distribution of lesson plans with full, partial, and no incorporation of the two SIOP features across the two groups, TCs who had taken the course and TCs who had not. The lesson plan submitted by the group of three TCs was included among those submitted by TCs who had taken the course, since one of the TCs in the group had taken the course.

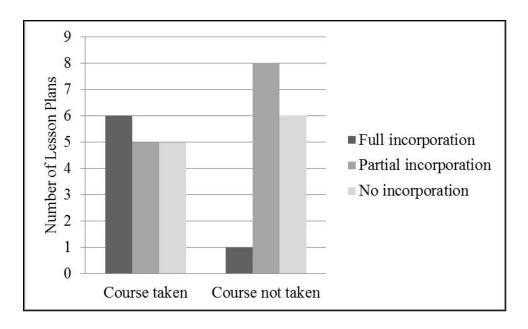


Figure 4.4. Lesson plans by course completion and extent of incorporation.

All but one of the lesson plans that reflected full incorporation of what was taught in the training were submitted by TCs who had taken the course. Only one TC who had not taken the course fully incorporated what was taught in the training into her lesson plan. Among TCs who had not taken the course, most of them submitted lesson plans that reflected partial incorporation of what was taught.

In order to determine if the content area in which TCs taught might have affected whether they incorporated features of AE into their lesson plans, the lessons were compared across content areas. As with the pre-tests and post-tests, the TCs were divided into groups of English TCs and TCs in other content areas. Figure 4.5 shows the distribution of lesson plans that reflected full, partial, and no incorporation of what was taught in the training across those two groups.

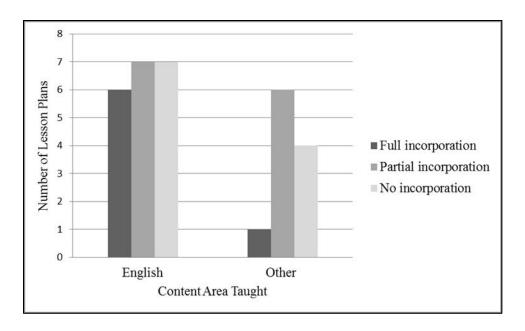


Figure 4.5. Lesson plans by content area and extent of incorporation.

English TCs submitted all but one of the lesson plans that reflected full incorporation of what was taught in the training. However, there were more lesson plans submitted by English TCs that reflected either partial incorporation or no incorporation of what was taught in the training. Although English TCs created more lesson plans that featured full incorporation than TCs in other content areas, these results shows that English TCs were actually more likely to submit lesson plans that featured partial or no incorporation than full incorporation of what was taught in the training.

Summary

Overall, the TCs in the sample were able to accurately identify specific features of AE on the post-tests and in the artifacts they submitted; however, few TCs described in their lesson plans how they would teach the features they identified to students. On the post-tests, lesson planning worksheets, and lesson plans, TCs named many features of AE, the majority of which were word level features, both technical and general academic

vocabulary words. TCs also named several different types of features at the sentence and the discourse level, including sentence frames, sentence structures, and structures of texts. TCs seemed to find differentiating between features of AE and other aspects of lessons challenging, especially at the discourse level. TCs' scores in the section in which they were asked to name features of AE that should be used to complete an academic task were higher on the post-test than on the pre-test. Neither the number of fieldwork experiences, the completion of a course on teaching CLD students, nor the content area taught had a significant impact on TCs' post-test scores.

In terms of the incorporation of what was taught in the training into their lesson plans, the majority of the lesson plans submitted by TCs in the sample included language objectives with specific features of AE. However, only a small number of lesson plans also included descriptions of how the features of AE would be taught. TCs in their first and second pre-practicum experiences submitted more lesson plans which reflected this full incorporation of the two SIOP features presented in the training than TCs in their third pre-practicum experience did. Nearly all of the lesson plans with full incorporation of what was taught were submitted by TCs who had taken the course on teaching CLD students

CHAPTER 5–FROM IDENTIFYING AND PLANNING TO TEACHING: HOW TEACHER CANDIDATES INCORPORATED FEATURES OF ACADEMIC ENGLISH INTO THEIR CONTENT AREA LESSONS

In this chapter, I present accounts of how each of the eight TCs in the smaller sample incorporated features of AE into the planning and teaching of one content area lesson. Each account begins with a brief description of the context in which the TC planned and taught the lesson, including the school site at which they were placed and the support they reported receiving from supervisors or cooperating teachers. Any relevant coursework or experience the TCs shared, related to language teaching or learning, is described as well.

All eight TCs identified at least one specific feature of AE on their lesson planning worksheets, but their lesson plans and their implementation of the lessons varied in terms of the incorporation of features of AE. In the previous chapter, the lesson plans were described as those in which features of AE were either fully incorporated, partially incorporated, or not incorporated. This chapter is organized into sections based on the extent to which features of AE were incorporated into the lesson plan and whether the features were then taught during the lesson. The order in which the accounts are presented, from no incorporation of features of AE into either plan or teaching to features of AE fully incorporated into the lesson plan and the teaching of the lesson, illustrates the variation in terms of TCs' incorporation of AE instruction into their content area lessons. Jill neither incorporated any specific features of AE into her lesson plan nor taught any features in her lesson. Hunter did not incorporate any features of AE into his lesson plan, but did teach several features during his lesson. The other six TCs were divided evenly

between two groups. Becca, Rose, and Lucas partially incorporated features of AE into their lesson plans by including them in their language objectives but did not teach any features to students during their lessons. Liana, Felix, and Carly fully incorporated specific features of AE into their lesson plans and then taught those features to students. In the final section of this chapter, I describe elements of TCs' experiences at the university and in the field that TCs cited as influential in their process of planning and teaching features of AE.

No Incorporation in Lesson Plan with No Teaching of Features

"But because the students weren't ELL students, I didn't really think about trying
to also enforce this language objective upon them." (Jill)

Jill, an aspiring history teacher, was placed at a diverse suburban high school for her second pre-practicum experience. Despite the diversity of the overall student population, her cooperating teacher had told her there were no ELL students in the class in which she taught this lesson on identifying the tone and message of World War I poems. In planning the lesson for her U.S. history class, which she taught during the second week of her placement, Jill reported receiving no help from her supervisor or from her cooperating teacher who told her he "wanted to see for my first lesson how I would go about doing it on my own." He told her to create a lesson on World War I poetry but offered no further guidance or assistance in planning the lesson.

She planned for students to work in small groups to read and answer questions about one poem about World War I and then share their answers with the whole class.

Although there were different sets of questions for each poem, all groups were expected to name the tone of the poem, whether it was pro-war or anti-war, what point of view the

poem was told from. Other questions asked students to determine what message readers were meant to take away from the poem and whether that message was valid and reliable based on the author's point of view. Based on these questions, Jill had identified several specific features of AE at the word and sentence level on her lesson planning worksheet, which were the terms *tone*, *pro/anti-war*, *point of view*, *reliability*, and *validity* and the sentence starters "This poem is pro/anti-war because", "The tone of this poem is", and "This poem is written from the point of view". Jill did not include any of these features of AE in her written lesson plan.

Jill began her implementation of the lesson plan by showing the students a painting, then reading one poem with the students and asking them the types of questions that they would later answer in their groups.

So what do you think the tone of this poem is? Is it happy? Is it sad? Is it angry? Is it cheerful? (Student answers.) Sarcastic? Why do you say that? (Student answers.) Right before it he says the old lie. This Latin phase is a saying that they were told. Why do you think they were told this phrase? Why do you think they know it? (Student answers.) Why do you think they tell them that? (Student answers.) So they'll fight. Good. You just answered the next question - how does that fit in with the poem? Do you think this poem is pro war or antiwar? Why? Kind of like why you were saying before, kind of sarcastic about war. The author of this poem was a British soldier, Wilfred Owen, and he was actually killed in World War I weeks before the peace treaty. . . . So what do you think the poem is trying to say or the painting trying to say or the two of them together? These are two totally separate artists. What do you think they were trying to say to their

audience? About war in general? Or anything? (Student answers.) They were lied to? About what? (Student answers.) So remember these are all points of view coming from different people in the war. So you'll see as you read later on in class they're not just soldiers. They're people in families and people that had different positions in war so keep that in mind. Keep point of view in mind when you're reading the poems.

While presenting this introduction to the assignment, Jill used the terms *tone*, *pro/anti-war*, and *point of view*, which she identified as possible word-level features to teach on the lesson planning worksheet, but she did not define or explain these terms for students.

She did not present the terms *validity* or *reliability* in this discussion or at any time during the lesson. The word *valid* appeared on one of the question sheets: "Given the poet's reputation for his feelings towards the war, do you think this poem is a valid representation of how most other people felt about the war?" Other questions hinted at the ideas of *validity* and *reliability*, asking students to evaluate whether a poem's message was "an accurate description of Americans' feelings" or whether the point of view expressed in a poem affected the audience's understanding.

Despite the fact that she had identified specific sentence starters for students to use when she completed the lesson planning worksheet, she told students when they asked that they did not need to answer the questions in complete sentences. In the interview following the observed lesson, she explained her reason for making this choice.

I wasn't sure what their level of understanding was for understanding tone or analyzing poetry, so at first I just said, "No, it's fine. Just do it in note form." So most of them wrote "angry", "sad", "regretful". They didn't use the specific complete sentences.

Unsure of how students would fare in completing the task, she did not want them to need to think about language forms in addition to content. She thought that requiring complete sentences would not have necessarily made any difference, because she didn't think "it would have changed the message of what they were writing down." She would only add that requirement in for one reason.

I think if I was working specifically with ELL students then I probably would have said, yes, use complete sentences to really enforce the language objective. But because the students weren't ELL students, I didn't really think about trying to also enforce this language objective upon them.

Since her cooperating teacher had told her there were no ELL students in that class, she did not think it was necessary to ask students to use specific features of AE. She believed that requiring ELL students to write in complete sentences would help them to understand what they wrote.

But for ELLs it might be a little difficult if they just write in note form. Then they might go back and look at it later and think, "Oh, what did I mean by writing that? What am I trying to say?" So I think by putting it in complete sentences it'll be just one less step that they'll have to go through when processing what they're reading and hopefully easier for them to have to remember the poem and go back and analyze it again.

During the group work, Jill circulated to assist students in answering the questions about their assigned poems. She thought that students "seemed to do really well" with the

terms *tone* and *pro/anti-war*, because "[t]hey knew exactly what [they] meant." She recounted what she said to one group to help them in determining the tone of their poem.

If you're just reading that, if you're reading those phrases or words, what do you feel? How do you usually use those words? They said, "I usually say that when I'm scared or upset." So then looking at the specific words in the poem and once they realized what the word meant and how they could figure out the tone then, they did a lot better.

Jill directed this group of students to analyze the language of the poem in order to determine the tone and message of the poem, but she did not teach or model how to analyze language in this way with the whole class before students began the activity.

She found that students had difficulty determining "whether or not you could really use the poem as a valid source."

I think the biggest struggle for me I was talking to one of the students and I was trying to get him to understand the poet for one of the poems was a doctor, so he was really educated and well respected in the community. Therefore his poems would probably be regarded as a really believable source, whether or not it was the whole honest truth. But he didn't understand that because he was doctor and he was well known in the society that, therefore, he would really be respected and people would believe him more.

In reporting this conversation with the student, she cited the student's lack of understanding of how doctors are viewed in society as the root cause for his confusion.

When I asked her if she thought the student did not understand what she meant by *valid*, she replied, "What he most struggled with was reliability, because he was missing the

fact that the poet was doctor and he was well respected." She was focused only on the application of the terms *validity* and *reliability* to the questions students needed to answer. She did not connect students' struggles to answer these questions to larger issues of AE proficiency, including knowledge of the terms *valid* and *reliable* as she was using them in this lesson.

Jill had observed the class only once before she taught this lesson, and she felt that not really knowing her students' prior experiences with the content or the language of this lesson made identifying the features of AE that they should be required to use more difficult. Since she did not know the students very well, she identified features of AE that she discovered were perhaps not challenging enough. "So I think I could have gone even further and made the word level and sentence level a little more complex. And taken it to a higher level rather than just focusing on *tone* and *pro-war* or *anti-war*."

No Incorporation in Lesson Plan with Teaching of Features "[T]he actual instruction of that, I think, was not my best effort." (Hunter)

Hunter completed this pre-practicum experience, his third, while he was also taking the required course on teaching CLD students. He felt that his placement site, a large, suburban high school with only six students classified as ELLs, was not a place where he could practice using the strategies he was learning in that course. Hunter described his cooperating teacher as being focused on content, not language. "We talked about academic language. I brought it up. She said, 'No, I don't know'. So that was not as much her wheelhouse. Not really any support on that." Conversely, he said that his supervisor, a doctoral candidate with whom I had previously collaborated on research

related TCs' development of knowledge about language, was "a lot more in tune with academic language."

In the eleventh grade history lesson Hunter taught on Lincoln's reaction to the Confederate attack on Fort Sumter in 1861, students listened to a lecture on the events leading up to the attack on Fort Sumter and were then asked to write an executive memorandum in which they assumed the role of Abraham Lincoln and explained to the Cabinet the action that would be taken in response to the attack. Hunter struggled to identify any specific features of AE to be used in these activities on his lesson planning worksheet. The only specific feature of AE he identified was the word *memorandum*. He wrote "persuasive writing" as a discourse level feature but did not describe the structure which would make the writing persuasive. Similarly, he listed at the word and sentence levels "words or phrases that indicate their opinion on the subject" and "a sentence that is persuasive", two identifications that are not specific in that they do not name the particular words or structures that make writing persuasive or that indicate an opinion. Hunter admitted that he did not know what to write in the features section of the worksheet and that what he had written indicated as much. "You saw my ellipses, my dot, dot, dot. Even in my own head, like, 'I don't know what I'm doing here'."

In the lesson plan, he did not include any specific features of AE that he would teach or explain to students. His language objective included the non-specific reference to persuasive writing, stating that students would "practice persuasive writing on a topic and articulate to the class by sharing why their decision should have been the decision Lincoln made." Hunter's supervisor had provided him with detailed feedback on how to incorporate specific features of AE into his lesson plan. Hunter volunteered to read from

his email the comments his supervisor made on the absence of any discussion of features of AE in the lesson plan. His supervisor had written:

Is there a specific sentence stem you can provide that will help students make persuasive statements? Are there specific vocabulary words you feel are important when making this persuasive statement? Currently this objective only names an activity that uses language. That is a good start. Now you actually need to teach students something about language so they can successfully complete this activity.

Although he received that feedback from his supervisor the day before he taught the lesson, Hunter did not make any changes to the language objective or the lesson plan. "I tried to do that with the stems but, again, life caught up with me and I didn't address it. Really good advice though." Hunter knew that he would face no repercussions for not making the changes to his lesson plans, because, as he explained, there was no accountability. "You work on it. You pass it in. Then you either did or you didn't. Ultimately it doesn't matter if you did or didn't do it because you're not revising it."

Despite the lack of explicit references to specific features of AE in the lesson plan, when Hunter taught this lesson, there were three instances in which he discussed specific features with students. The first two instances were incidental definitions of technical vocabulary during his lecture, and, in both cases, Hunter called on student volunteers to define the words. First, a student asked what *secede* meant, and Hunter asked another student to remind the class of the definition. He had assumed that, since the class had been studying the Civil War, they would have already discussed the word *secede*. "I guess that was a battle that I chose and said, they'll know this word." After

class, his cooperating teacher told him that they had, indeed, gone over the definition of *secede* and that the student was testing him. Hunter thought that he had handled the situation appropriately. "I still felt that was an OK time to just say, well, I won't explain it. Can anyone give an example?" By asking someone else to define the word, he could provide the answer quickly without allowing the student's request to get the lecture off track. In the second instance, Hunter used the word *militia* in his lecture and then stopped and asked a student to define the word. Throughout the lecture, he engaged in initiation-response-evaluation interactions with students at various points; these interactions were not written into this lesson plan. Asking for the definition of *militia* was the only interaction of this type which involved a language feature. It was unclear why he chose to engage in discussion about this word in particular, as it was not closely related to the specific content of the lesson.

After the lecture, Hunter described the persuasive writing activity referenced in the language objective to students:

What you guys are going to do in your groups that you are already in, you're going to write an executive memorandum. You're going to take the position of the Cabinet member that I'm going to give you, and you are going to write the memo as if you are President Lincoln saying what action you're going to take.

He used the word *memorandum*, which he had identified on the lesson planning worksheet, but did not offer definition or explanation of the term.

Hunter followed this introduction to the assignment with a quick presentation on the structural elements of memos. He presented two different sample memos. The first he showed on a Power Point slide. He told students what the document was.

Here's an example of a memorandum from FDR during the pre-WWII era. We have important things like where is it coming from, the date, the word *memorandum*, who's it going towards, and then just specifically what we're talking about and, of course, a nice signature at the bottom.

Then he wrote an example of a memo on the whiteboard.

11/20/14

Memo to Mr. K

RE: Stop teaching

You're running out of time.

Signed,

Everyone

Hunter said that he provided two different models because he wanted the students to focus on the structure, not necessarily the content, of the memos. He thought that the Roosevelt memo would help them see the structure but, since they might get bogged down in trying to understand the content of the memo, he also created a short, non-historical memo to allow them to focus only on the structural elements. Though he did not include any description of this discussion about memo structure in his lesson plan, he seemed to have planned to include this feature in his lesson, because he had the Roosevelt example in his Power Point.

When Hunter assessed the memos that the students created, he discovered that most of the groups had included the necessary elements he discussed in class. The only errors made were in using an incorrect date, as two groups used the date of the class (November 2014) instead of March 1861, and one group forgot to have a line that began

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with "RE". He attributed students' success to looking at the memo in the Power Point and not at the one he created on the board, because he felt that he did not have enough time to create a good example.

If I'm going to be honest with my own personal example, I rushed through that.

Maybe they were able to kind of see a little bit of the structure, but the actual instruction of that I think was not my best effort. I think in that case the historical example on the board was probably better. I still had that left on the board.

He also mentioned that students likely had experience writing letters and emails, which contain some of the same elements as a memo, helping them to be successful in including all of the necessary elements in their work.

Evaluating the writing that the students had produced during the lesson helped Hunter to explain during his interview what he meant by "persuasive writing" in this context. "[Y]ou're taking on this role of that person. So you might use their quotes. So persuasive writing in their memos - they're having to use evidence with this actual story." He provided examples from the student work he had collected that demonstrated what he meant by using evidence to be persuasive. He described the way in which the two groups "that actually really nailed that" integrated quotations into their writing.

Here's the example: "Advice came to me by way of Mr. Chase, Secretary of the Treasury, who argued that" and then they did quote "Fort Sumter should in my judgment be reinforced". And then another one . . . "I agree Mr. Smith when he says" quote "believing Fort Sumter can not be successfully defended, I agree its evacuation is a necessity."

The other four groups, he believed, were not as successful in their persuasive writing, because they had chosen to paraphrase instead of quoting the documents directly. "So maybe that's the way that we look at it there's hierarchy. ... That would probably necessitate a discussion to say that there are better ways. If you actually use someone's actual words, that's more powerful than paraphrasing their words." Hunter wanted students to use direct quotations and integrate them into their writing using a particular format, but he seemed unable to specifically name those features prior to teaching the lesson. Instead he focused on teaching them the structural elements of memos. Reflecting on the student work he collected and talking about what the good examples looked like provided him with an opportunity to dig deeper and think about the features of AE that he believed made up "persuasive writing" in this instance. After he evaluated students' writing, he decided that it would be helpful to spend class time reviewing with sentences how to integrate quotations into complete sentences in the format, "As blank said, and then give the evidence."

Partial Incorporation in Lesson Plan with No Teaching of Features

"They're all geniuses and there's no point in my being present to teach the lessons."

(Becca)

Becca was in her second pre-practicum placement, teaching English in the middle school program of an all-boys Catholic school that enrolls students in grades 7 to 12. This school environment was markedly different than the large, urban high school where Becca, like all secondary TCs, had completed her first placement. One major difference was the perceived lack of linguistic diversity in the class. Becca "assumed on the basis of [cooperating teacher] not mentioning it and on the basis of looking at a list of their last

names" that all of the students were native English speakers; in observing her lesson, I noticed at least two students from diverse backgrounds who might not have been native English speakers. In terms of support she received from either her supervisor or cooperating teacher, she reported in her interview that she had seen her supervisor "a total of 20 minutes" up to that point in the semester and that her cooperating teacher was "very supportive but very hands off in the planning process."

Becca explained in the interview that she completed the lesson plan before she did the lesson planning worksheet, but she made no revisions to the lesson plan, because "[t]o be quite honest, it was very late at night when I did the lesson planning worksheet."

Although she said that her language objective was much clearer after she completed the worksheet, she did not revise it in the lesson plan because she knew that I was the only one who would look at it. "Since you had the worksheet, I knew you'd have the correct [one] and I didn't think [my supervisor] would go through and check the academic language objective closely. That's why I didn't change it back."

Becca identified specific features of AE at the word and sentence level on the lesson planning worksheet and in her lesson plan, but, as a result of her decision to not revise her language objective, the features of AE identified in the lesson planning worksheet are not the same as those identified in the lesson plan. On the lesson planning worksheet, she listed the words *fundamentally* and *condition* and "Man is X because Y proves" and "Man is X because Y, Z, and A prove" as the specific features of AE that she could teach. She listed these two sentence structures as discourse level features. She believed these were discourse-level features, because they exemplified the way language is organized in a debate. "I know that discourse level, it kind of described that it's like

organization of thought really." Becca explained that she would focus on discourse level features when working with the "very advanced students" in this class, who would already know the necessary word and sentence level features. In her lesson plan, Becca included three different, specific sentence level features of AE that students should use during the debate: "I agree with ___ and ___", "I disagree with ___ because ___", and "Can you elaborate on that?". She explained that these features would help students phrase responses that "were respectful and also clear, whether they are about to agree or disagree."

Becca spoke very little in the implementation of the lesson plan. After a starter activity in which students discussed how children might behave in hypothetical situations, Becca explained the debate topic to them.

So I want you guys for the next about half hour or so, maybe 20 minutes, to research on your iPads or just think about - don't start quite yet – research on your iPad or just think about whether man is fundamentally good or fundamentally evil. And be aware you're going to have to debate this during second block. And I'm going to have this half of the room say that man is fundamentally good. Heartbreaking, right? And this half of the room is going to say that man is fundamentally evil.

In this explanation, she used one of the words she identified on the lesson planning worksheet, *fundamentally*, several times but did not explain or define it for students.

After students had done their research and discussed their arguments in small groups, Becca explained her expectations regarding the debate.

So the rules for this debate are as follows. One, I want you guys to raise your hands every time you have a point to make. We'll see if the discussion flows. We might be able to lift that rule. Certainly for now raise your hand every time you have something to say. And I guess that's really the main rule. Be respectful to each other when you disagree.

Although in her language objective Becca identified three specific sentence starters that students should use in the debate to demonstrate respectfulness, she did not present or model these sentence-level features before the debate began, only reminded students to be respectful. The remaining forty minutes of class time was spent on the debate, with students talking the majority of the time; Becca interjected only once to remind them about turn-taking behaviors. In her interview, Becca commented on the fact that she did not bring up features of AE with students.

I didn't talk to them about language during the debate, and I totally meant to but it just kind of slipped my mind and I wanted to make sure they had enough time to really get in their research and talk in their small groups. But if I were to do this again, I would take a moment to talk about the "I disagree" or "I agree", "can you elaborate", or "I agree with this part but not this part".

In addition, she explained that her decision was based on what she saw from students.

So I guess my plan with teaching academic language was to evaluate how their debate was going and then step in if I saw a lack of certain key phrases that exemplify some necessary facet of a debate, which did not appear to be the case during their debate.

She summed up how she viewed her role during the lesson when she said, "They're all geniuses, and there's no point in my being present to teach the lessons."

In her interview, she did mention a few word-level features that she could have taught. "I don't know if I ever used the phrase *condition of man* but that's what they entire debate was about so I probably could've brought that up." She also recalled that students "mentioned ideas that actually have specific names", such as *relative truth* and *original sin*, during the debate, but she chose not to interrupt the debate to provide students with the names for these ideas. If she had decided to focus students' attention on these terms, she would've "stopped them ten minutes early and just written up a couple of main points on the board and then kind of just touched on each of them. But, I mean, you saw how the debate was going. I really didn't want to stop it early."

"Nine out of ten classes we've seen, they read and they answer questions and there's a quick wrap up at the end." (Rose)

Rose was placed at the large, diverse urban high school where all secondary TCs complete their first pre-practicum experience. Most of the TCs in their first placement teach their lessons in groups with TCs from the same or similar content areas. Rose planned and taught her lessons with two other TCs, one also an aspiring biology teacher, the other an aspiring chemistry teacher; this was the second and final lesson the group would teach. The lesson consisted of two activities, a reading activity in which students annotated a short article about skin cells and answered comprehension questions about it and a writing activity in which they described each phase of mitosis in a graphic organizer; the topics of both activities had been suggested by her cooperating teacher. Rose was only able to recall one suggestion that her supervisor offered during the

planning process, which was that the TCs should focus on some elements of AE other than technical vocabulary words related to mitosis.

Rose's cooperating teacher, in addition to providing the topics of the activities, played a significant role in how the lesson was taught. At some point between when the TCs submitted the final draft of the lesson plan and when the lesson was taught, her cooperating teacher asked that the lesson be changed so that "do now" reading activity would be the main activity and the writing activity would be the "do now." Rose believed that he asked for them to change their lesson, because "a lot of that class is focused on reading comprehension". She reported, "Nine out of ten classes we've seen they read and they answer questions and there's a quick wrap up at the end." The teacher's request to focus on the reading rather than the writing greatly affected the way in which the features of AE identified by Rose and her fellow TCs were addressed in the teaching of the lesson.

For the reading activity, Rose explained how they identified the specific word level features of AE that they might teach. "I looked for words in that the kids wouldn't have been exposed to before because I think it's easiest to work from the word level up, from smallest to biggest. I identified *epidermis* and *keratin*." She also wrote on the lesson planning worksheet that students should answer the comprehension questions in complete sentences, a specific feature of AE that many TCs identified. She listed "skin article" as a discourse level feature, which is not actually a feature of AE, but simply a description of the passage that students would be reading. In her lesson plan, there is no language objective that corresponds to this activity, because this reading was originally intended to be the "do now", a brief opening activity for the lesson.

The graphic organizer in which students would summarize the events of the phases of mitosis was designed to be the focal activity of the lesson. On the lesson planning worksheet, Rose named several specific features of AE which students would need to use in completing the graphic organizer, including three vocabulary words, spindle, centromere, and nuclear envelope and "short summary sentences". In the lesson plan, the one language objective included the word spindle but stated that students will "define centrioles, spindles, sister chromatids, daughter cells, chromosomes, and the phase names by using them correctly in definitions on their graphic organizers." Rose recalled that her supervisor had given the group some feedback related to this language objective.

She wanted us to be more specific because I agree that the first time we went through it we just put down the specific words we wanted them to understand, the very content specific [words] – *centrioles*, *sister chromatids*, the usual. She wanted us to see if there was anything outside of that that may be necessary in understanding mitosis.

Despite her supervisor's suggestion that she consider other features of AE that students needed to use or understand, Rose did not revise her language objective but said that her supervisor's feedback prompted her to "put some words up on the board so that the kids had the visual when we were talking with them."

In the lesson plan, this writing activity actually consisted of several steps, including gluing the correct picture next to the phase name, writing the summary of the events of the phase, and switching papers with a partner who would circle or highlight the required content-specific vocabulary used in the graphic organizer. Due to the alteration

in the lesson sequence, when Rose and her fellow TCs taught the lesson, this writing activity was shortened. Students were instructed to complete only the steps written on the board. "Name the phase. Draw and label a picture of the stage. Write a summary of the events of each stage." Students were not instructed to use the vocabulary words that were included in the language objective. Also, since the partner aspect of the task, in which the use of the words would be assessed, was eliminated, students were not held accountable for using the words.

When students had completed the graphic organizer and the TCs were reviewing the correct answers aloud, Rose made two brief references to word-level features of AE, neither of which were included in the lesson plan. One of these words was *condense*. After her fellow TC had drawn a diagram on the board, Rose asked, "Who can tell me what are the words that you use to describe it? What's happening? [Student answers.] The chromosomes become visible. Excellent. Another way to say that is the chromosomes condense and become visible." As the other TC drew the next phase, Rose asked students, "What's the middle of the chromosome called? There's a specific name for it. What's the middle of the chromosome?" A student supplied the correct answer, centromere, which was one of the vocabulary words Rose had identified on the lesson planning worksheet but had not included in the language objective for the lesson. Also, as Rose recalled, the TCs did write a few of the vocabulary words on the board as students said them. "We had the phases – prophase, metaphase, anaphase, telophase, interphase, and cytokinesis. And we had sister chromatids and I think we put centrioles." These words were written next to pictures the TCs drew for each phase but not discussed or defined.

The majority of the class period was spent on the reading activity. Rose told students to read and annotate the article, using the reading strategies they had been taught by their teacher, including "write a sentence about each paragraph" and "highlight the important words". Students' use of the annotation strategies was not evaluated. Along with the article, students were handed a short list of reading comprehension questions to answer; Rose described the questions on the sheet as "direct from the text questions", with the exception of the last one which asked students to make the connection between skin regeneration and mitosis. The features of AE Rose identified on the lesson planning worksheet, *epidermis*, *keratin*, and complete sentence responses, were not discussed with students before they read the article or when the TCs verbally reviewed the answers to the questions.

In her interview, Rose acknowledged that, although she felt that the students had the necessary content knowledge about mitosis, they were not using the appropriate academic vocabulary to express that knowledge in writing on their worksheets or in sharing their answers with the class, and, therefore, their descriptions of mitosis were less specific.

So they'll say, "The things were pulled apart" or "The things moved" and they need to say "The sister chromatids or the spindles moved." They understood what was happening and they were able to point and say what was happening. They understood the sequence of events. They were able to put them in order but they just weren't using the correct vocabulary to describe it. So in their summaries they knew what was happening but they weren't as specific as we wanted them to be.

Rose attributed students not using specific academic vocabulary at least in part to the TCs' lack of focus on language. She acknowledged that they had not supported students' acquisition and use of the academic vocabulary during their lesson.

I think we definitely could have been better about using the specific words. I think we got a little caught up in making sure they understood the events rather than - I don't think we did a good job defining the each of the things we outlined - *centrioles*, *spindle*, *sister chromatids*.

Rose also suggested that students did not use features of AE for another reason.

Maybe also a fear of getting it wrong because if they're more vague it's easier to be more like, "That's what I meant" rather than if you use *centrioles* instead of *spindles* then you're wrong. It might just be a safety maneuver to have a better chance of being right.

One group in her class whom Rose believed were struggling to use AE were the five to ten ELL students her cooperating teacher had told her were present in the class. Rose described the differences she had seen in the writing on the graphic organizers of ELL students and those who were not classified as ELL.

I noticed the students who are not ELLs were much quicker with the summaries. [The summaries] tended to be longer as well. [Non-ELL students] were more likely to write in full sentences and write more. While the ELL students were writing "nuclear envelope" or maybe a very short sentence, not even enough to know - when you take really bad notes in class, kind of like that. They'll just write down words that are related but they don't know how they're related or why they wrote them down.

She described the ELL students in the class as "very hesitant" users of AE. "They always want me to confirm that they're doing it right."

Rose felt that the original version of the activity, in which students would highlight their partner's use of vocabulary words, better supported her language objective and focused students' attention more clearly on the use of AE. She knew that students needed more explicit instruction and more support in order to correctly use the required vocabulary words.

If I were to teach it again, I'd probably have an additional worksheet for the kids that had the specific vocab words with definitions and do the portion of the activity where they switch with a partner and highlight and the partner makes sure they're using each definition correctly. So not only have they seen the definitions, they used the definition. I think that would reinforce the specific terms.

"Had I been making the worksheet myself, these instructions would have been included right in there." (Lucas)

Lucas was completing his third and final pre-practicum experience at the same diverse, suburban high school where Jill was teaching; he also had the same supervisor as Jill. When Lucas was asked if he received any help from anyone in planning his lessons, he replied, "My supervisor is pretty hands off this semester. He was brought in after the supervisor training. I didn't really get any comments at all from either him or my CT." However, Lucas explained later in the interview that the lesson activity, a simulation designed to teach students about the how the Great Depression affected poor families, had been entirely created by his cooperating teacher, which may explain why his cooperating teacher did not comment on his lesson plan.

This eleventh grade history lesson featured two activities. First, in the simulation activity Lucas's cooperating teacher designed, students were grouped into "Depression families" of different sizes, given a budget of \$7 to buy food for their family, and instructed to make a grocery list and fill in a menu chart. They were provided with grocery prices from 1929 to help them to stay within their budget. On the lesson planning worksheet, Lucas had indicated that students should complete the list in an "organized fashion", a feature of AE that is not specific because he did not name any particular way in which students should organize the lists. He explained, "Any way they organized it would have been fine so long as it was organized in some fashion." In his lesson plan, he reiterated this non-specific organizational requirement in the language objective, which stated that students will "create a shopping list for groceries they'll need to feed a family for a week in an appropriate style with items listed in an organized fashion."

When Lucas taught the lesson, after students were formed into their family groups, he gave students instructions on what they would do during the simulation.

Your family has a weekly income of \$14. Utilities and the rent are \$7. So you have \$7 a week to spend on food. You need to prepare to list of what food you're going to buy, not going over \$7. And once you have that shopping list, on the little chart you have you want to fill out what your family's going to be having for breakfast, lunch, and dinner for that week.

Delivering the instructions for the activity was really the only instance in the teaching of this lesson when Lucas addressed the whole class, and he did not tell students that they should organize the list. While his cooperating teacher called out explanations and clarifications to the whole group several times during the lesson, Lucas circulated among

the groups to offer help or answer questions. He explained that when he was going around, he was encouraging students to think about the organization of their lists.

I tried when I was going around in their small groups and when they were thinking about this, "Try writing it down in ways that reflect some level of planning. You want to be organized about this." I'm not sure how well that was communicated. One of the problems with this lesson was that I was using a premade worksheet my CT had given to me. Had I been making the worksheet myself, these instructions would have been included right in there. I would have stated out in writing, "Be sure to organize things in some way. You can decide how you want to as long as it's done." So I could see a lot of students in the end did not organize too effectively.

Lucas's assessment of the lists was all done as he circulated; the lists were not collected from the students, because, according to Lucas, his cooperating teacher "doesn't really focus on written or collected work very much."

The other language-based task described in Lucas's lesson plan is an exit ticket in which students would express their feelings about the simulation in which they had participated. This assessment was the only aspect of the lesson that Lucas created himself. On the lesson planning worksheet, Lucas named several specific features of AE that students should use in their exit ticket responses: "transitions words like 'because', sentence starters such as 'I feel' or 'I think' or 'I'm of the opinion that', a strong opening sentence that explains what the paragraph will be about, and a strong closing that makes the reader reflect." His language objective, students will "express how they felt during the class activity and how it has affected their viewpoints on life during the Great

Depression", did not include any of these specific features. However, just below the language objective, in the section that asks TCs to describe how they plan to assess students' attainment of the objective, Lucas wrote, "Students will write a five sentence paragraph exit ticket expressing how they felt with a main idea at the beginning of the paragraph, an explanation/defense of their feelings, and a strong closing that makes the reader think or reflect." He explained why he chose to include these specific features of AE in the description.

I wanted to get them thinking about how do you write in a way that means that you're defending an argument. So I thought of these phrases that would be indicative of a defensive paragraph. Strong opening sentence. I always think that's important. I wanted them to really particularly think about making a strong paragraph and then also a strong closing because I thought if it's five sentence paragraph there's a good chance that last sentence would be "and that's what I think" so I was hoping to get them to go a little bit beyond that. I wanted them to leave me with some sort of reflection.

Although "strong" opening and closing sentence is perhaps not the most specific way to describe a language feature, he seemed to have a definitive paragraph structure in mind. In his interview, Lucas demonstrated how he would have told students about the features of AE they needed to use when completing their exit ticket.

Everyone take out a piece of paper. I would like you to write a 5 sentence paragraph on how you felt during this activity, how it might have changed your views. I want it to start off strong, really set up your argument. Defend it

throughout. And in the closing don't just restate what's already been stated. Say something new and try to make it leave me thinking.

I had asked for him to demonstrate how he would have introduced the assignment, because students were not asked to complete this assignment during the lesson. Lucas explained why this activity did not take place. "My CT didn't tell me but he was handing out books, so he handed them out and they had to write down the page numbers and that took 15 minutes. Unfortunately with that, there wasn't time." Lucas had known that the exit ticket would take between 10 and 15 minutes to complete; he had tried to plan the lesson so that he would have this time at the end, but his cooperating teacher's decision to hand out books interfered with his plan.

Lucas realized that changes should be made to the lesson to ensure that students would be aware of the features of AE they were expected to use. He listed the revisions that he would make if he taught the lesson again.

I probably would retype the (simulation) activity myself as I said with the listing. I would have the academic language goals clearly stated to try to get more organized lists. I would try to shorten the activity a bit to make sure I had time to get to the activity, the exit ticket, in the end. I also would type up the directions for the exit ticket on a piece of paper and hand those out to students as opposed to going over it, as opposed to just saying it.

Full Incorporation in Lesson Plan with Teaching of Features

"I think that's how I want to implement my experience into the classroom." (Liana)

Liana was the only TC in the smaller sample who was bilingual. A native speaker of Spanish, she immigrated to the United States from South America at age seven. When

she came to the United States, she was initially identified as an ELL student but spent only part of one year in an ELL class. She attributed her quick reclassification to having attended a Spanish-English bilingual school in her home country. In her interview, she explained how one of her own experiences with language in a classroom has shaped her beliefs about teaching.

I remember the first week after I transferred out of my ESL class they were working with the vocabulary word *people* and I didn't know how to spell *people*. The whole class learned how to spell *people* the week before I got there. I went up to the teacher and asked how to spell *people*, and she had the whole class spell it at me. I was mortified. I was so embarrassed. I never asked a question for the rest of the year. I would save my questions and ask my parents at home. I was a very small child, but still I think at any age students should feel comfortable being like, "I don't understand this" or "can you clarify". I think that's how I want to implement my experience into the classroom is making sure that kids are OK with that and making sure that they're willing to either ask me or ask their neighbor or do whatever to help them not have that language block the content.

Liana was placed at the same diverse urban public school as Rose and worked with the same supervisor. Liana relied more on her cooperating teacher than her supervisor for support in planning lessons, since her cooperating teacher "had sent ten replies before our supervisor had even gotten to it." Also like Rose, Liana planned and taught her lesson with two other TCs. One of the other TCs was enrolled in the required course on teaching CLD students during the semester in which the research took place.

In their lesson on identifying and explaining possible themes of the novel *To Kill a Mockingbird*, Liana and her fellow TCs taught a mini lesson on theme and modeled how to complete a graphic organizer in which students would support their claim about a theme of the novel. On the lesson planning worksheet, Liana and her fellow TCs named multiple features of AE that were not specific, such as the "difficult vocabulary", "complex grammar", "a range of sentence patterns" that students would encounter in the novel. They also included "discuss theme" and "follow connected discourse", which are not features of AE but ways in which students would engage in using AE during the lesson.

The TCs identified only one specific feature of AE, the word *theme*, on their lesson planning worksheet, but they incorporated both *theme* and another word level feature, the term *moral education*, into their lesson plan. Liana explained that they added an explanation of what *moral education* meant at the urging of their cooperating teacher.

I don't think that she knew that she was talking about academic language, at least she didn't frame it that way, but really a lot of it was, in her emails, 'Make sure you're defining *moral education*. They might not understand what this means.'

The TCs incorporated both word level features into their lesson plan as elements of the mini lesson. When Liana taught the mini lesson using a Prezi, she defined *theme* as "the big idea, main message, or underlying meaning of a story." Additionally, the Prezi slide showed questions that students could use to help them determine the theme of a work: Liana felt that including these questions would help students better understand the term.

And that's where on the theme Prezi slide, I had questions that help you identify theme because they would start and go, "OK, look at these questions." Think of it

that way instead of explaining the theme because for a lot of them, even understanding the definition of theme doesn't mean that you can just be like, what's the theme and they can spit it back at you.

This idea about not simply providing students with a definition for a vocabulary word comes back several times in Liana's teaching and reflection on this lesson. She attempted to provide a similar explanation of the unfamiliar term *moral education*. When she was presenting students with possible themes they could choose, Liana explained the meaning of *moral education*. "Moral education is what Atticus's role is in the book, trying to teach his kids the difference between right and wrong, trying to teach them to value certain things."

Their cooperating teacher had asked the TCs to use a think aloud to model the procedure for completing the graphic organizer, in which students would choose to identify and explain one theme of the novel. One of Liana's fellow TCs did the think aloud while projecting what she wrote on the sheet using a document camera. The completed graphic organizer is shown in Figure 5.1.

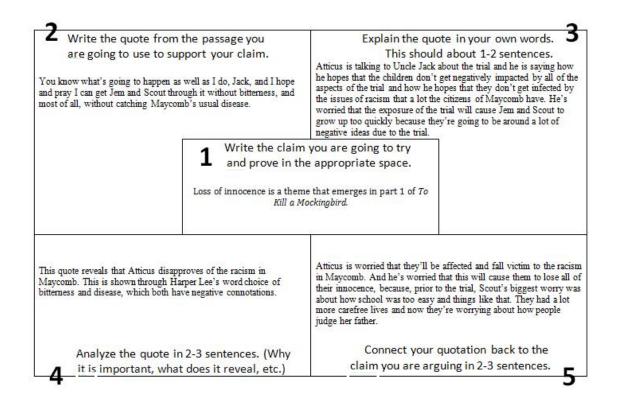


Figure 5.1. The completed graphic organizer modeled during Liana's lesson.

During the modeling, the TCs made visible, but did not explicitly teach, two specific features of AE, one sentence level and one discourse level, which students needed to include in their graphic organizers. First, the TCs wrote in the lesson procedure that "claims about the themes of Part One will be presented on the Prezi, or maybe even write them on a large post-it note - this will be available to view while students complete the activity." This sentence level feature, the structure of the claim that students should write, which was written in the form "(Name of theme) is a theme that emerges in part 1 of *To Kill a Mockingbird*", was projected on a Prezi slide, and the TC who modeled the process wrote one of these claims in her graphic organizer in the first box. Students were able to choose a claim instead of creating one themselves, making it more likely that all students would include a claim written in the expected format. The TCs also specified a

required amount of language, "1-2 sentences" or "2-3 sentences", to be used in the third, fourth, and fifth boxes. This requirement is written on the graphic organizer itself.

Although the TC did not verbally reinforce this requirement, her model responses all met the specified amount of language for each box.

Liana also chose to define for students an additional word level feature of AE that came up during the teaching of the lesson. As the TC who was modeling the procedure completed the fourth box, she said:

To clarify, in section 4, when you're analyzing the quote, it's helpful to look at what the author's doing, which is why we pointed to Harper Lee's word choice. Thinking of a specific example from the passage strengthens your analysis. So what I wrote in box 4 is: "This quote reveals that Atticus disapproves of the racism in Maycomb. This is shown through Harper Lee's word choice of bitterness and disease, which both have negative connotations."

At this point, Liana interrupted her fellow TC to ask if students knew what *connotation* meant. When several students called out that they did not know the word, Liana explained,

So basically it's just the feeling that the word gives you. When you think bitterness and disease, those are bad sounding words. They make you think of bad tasting coffee or being sick and those are bad things. When the words give you negative feeling, it shows you what the author wants you to think about the situations.

In this instance, she again justified her approach to defining the word in a more applicable way. "I was trying to define it - not textbook definition but very much like,

'it's like the feeling the word gives you', really kind of boiling down to the big takeaway about the word." She felt that simply providing a definition of the word would not be as helpful to students as explaining the meaning in a more concrete way, using the example that the other TC had just presented.

As for her decision to stop the lesson to define *connotation*, Liana felt that students would not be familiar with the word based on her observations of them and her CT's description of their knowledge of AE.

Right away, I was like, that's something that they're not going to know and she didn't define it. Our CT gave us an idea of where they would be in terms of the kind of language that we were using. So we thought ahead of quite a lot of those things. Then there still were a few things to be defined.

She also felt that she was more comfortable with "on the fly stuff" when she was teaching than with formal planning of lessons, which is another reason that she did not hesitate to interrupt the other TC's presentation and tell students what they meant by connotation in the lesson.

Since the students were going to keep the graphic organizers for use on a test, checking students' papers and answering their questions as she circulated was Liana's only chance to evaluate how well students were able to complete the task. This quick assessment of student work led Liana to propose two revisions she would make to the lesson in terms of teaching AE. She would add a language support for students by "giving them the beginning of sentences that they will fill in with their own opinions or quote or whatever that may be. I think that would have gotten their thinking on the right track a little faster than them trying to generate those sentences on their own." She thought that

providing sentence starters might allow students to better express their content knowledge while still requiring them to write in complete sentences. The students were only given about ten minutes to fill in the graphic organizer, so students did not have a lot of time to consider both the appropriate content and the correct format for their sentences.

She also realized that, in the modeling of the graphic organizer, they had not really taught students to examine the language of the passages in order to determine the theme. She talked about her experience working with one student who was struggling.

She had it. But she couldn't identify exactly where she was finding it. It was just like, "This is the vibe I got from this passage." So with her, it was a lot of, "OK great. You took this away. What was your clue? If you had to make someone guess the same theme that you've decided, what sentence would you read to them?" And helping her to understand where she was taking this away from as opposed to the vibe that she got from the passage.

The "vibe" of the passage is created by language, an idea that Liana acknowledged that they had not explained to students during the lesson. To remedy this issue, she would add "the extra step of, 'now what quote do I use to really explain this?'. That's tough. That's something I would have added because I think a lot of the struggles were with what language to look for in the passage to help them do that." She understood that students would need to understand more about how language creates the "vibe", as her student explained it, and that she would need to provide more instruction in how to determine and describe the author's use of features of AE, over and above explaining the word connotation and how it applied to that one passage from the novel.

"But I guess it's just on me to focus more explicitly on it and incorporate it." (Felix)

Felix's third pre-practicum placement site was a diverse, suburban high school. Even though he did not feel that he had seen students struggling with language in the class in which he taught, which he referred to as "very high level", he knew that "there are some students that speak a different language at home." Felix's pre-practicum supervisor was also the instructor of the course on teaching CLD students, which Felix was enrolled in that semester. When Felix spoke about his cooperating teacher, he explained that, while providing support in determining the content of the lesson, his cooperating teacher did not provide specific advice about incorporating AE instruction into lessons. However, Felix reported that he had observed the teacher engaging students in discussions about language during his history lessons.

My CT does a lot of that kind of thing where he introduces like a language term, "Foreshadow, what do you think is going to happen here?" or "Give an example of an idiom in this text." And they go and they read and they pull them out, and he starts a conversation about his favorite idiom. And I think that's valuable. One of his best friends is in the English department and they kind of go back and forth arguing about that. "Since I'm teaching English to my kids, you should teach history to your kids." So they kind of go back and forth on that. He's definitely a big proponent of academic language and it definitely shows in his teaching.

Felix taught a tenth grade history lesson on how the Congress of Vienna affected Europe in terms of diplomacy and territory. The lesson consisted of a lecture with multiple "turn and talk" opportunities, a vocabulary activity, and an exit ticket. Felix did not include any specific features of AE from the lecture and "turn and talk" opportunities

on the lesson planning worksheet, but he did write into the lesson procedure that he would "define *Balance of Powers* on the board". Since the classroom he was teaching in did not have a board, Felix showed students the definition of *balance of powers* on a Power Point slide while he read it aloud.

Felix added the vocabulary activity, which was designed to deepen students' understanding of the word *alliance*, to his lesson after he realized that the lesson planning worksheet asked for TCs to identify features of AE for two important uses of language in the lesson plan. The activity, as he described it in his lesson plan, required students to "brainstorm with a partner, and come up with 2 synonyms, 2 antonyms, and 2 famous examples of alliances". Felix named two specific word-level features, *synonym* and *antonym*, and two specific sentence level features, the sentence starters, "A synonym of alliance is" and "An antonym of alliance is", which students would need to use or understand to engage in the activity.

He began the activity by asking a student volunteer to define the term *alliance* for him. Then he checked to see if students knew what synonyms and antonyms were by asking student volunteers to define the words and provide a synonym for the word *house* and antonyms for the words *dead* and *hot*. After this questioning was finished, he instructed the pairs to write at least two synonyms and two antonyms for the word *alliance*, then walked around the room and asked several pairs if they would share an answer when the class came back together. He did not ask students to use the sentence starters he had identified on the lesson planning worksheet when they were sharing answers. Then Felix instructed the pairs: "Write two famous alliances and, no, they do not have to be historical. They can be from pop culture. They can be from sports. They

can be from comics. They can be from a lot of different things." Pairs were then encouraged to share at least one of their examples with the class.

Felix was not sure where he got the idea for the vocabulary teaching strategy he used in his lesson, but he thought that generating synonyms and antonyms was a good exercise for this word.

I think *alliance* works well for that. There's a lot of words, you know, *friendship*, *enemy*, *foe*. There's a lot of different words kids could have used. It went smoothly like that, I guess. I couldn't think of any way to talk about it besides define and defining isn't the best, most effective way to teach it.

He wanted to avoid simply providing a definition, because he felt that *alliance* would be a word his students would see often and, for that reason, it was worth spending time to ensure that they understood the word.

So they mentioned, when I asked them to do the examples, a lot of them mentioned the allies of World War II or the allies of other famous wars so I guess it's going to help them when they do get to that point of that content. It will help them there because it's a reoccurring word I guess.

At the end of class, students were assigned an exit ticket, which asked them to compare Europe territorially and diplomatically before and after the Congress of Vienna. On the lesson planning worksheet, Felix listed several specific features of AE that students should use in their comparison, the words "before, after, whereas, both", the sentence level structure "Before the Congress of Vienna ______, whereas after the Congress of Vienna _____, and the discourse-level requirement of a five sentence response. He did not mention these specific features either in his lesson plan or during his

teaching of this lesson. There is a language objective in Felix's lesson plan that corresponds to the completion of this exit ticket, but it states that students will complete the exit ticket "using compare and contrasting words"; this identification is not a specific feature of AE, because it does not describe which comparison or contrast words should be included. He added this phrase based on his supervisor's comment that his original language objective was not specific enough. His supervisor had written to him that he needed to "specifically refer to the language that students are expected to use and that you have to teach to them." He was not sure that this change had matched what she wanted him to do. "So did I make the change? I guess I really didn't make too much of change but I added using compare and contrast words. . . I guess I'm still a little up in the air, confused."

In his lesson procedure, the directions for the exit ticket stated that students needed to answer "[i]n a short paragraph (3-5 sentences)." When Felix asked the students to complete the exit ticket at the end of class, he informed students of this discourse-level requirement, not the five sentences he had identified on the lesson planning worksheet. In assessing the exit tickets, Felix found that all students wrote at least three sentences, and "[m]ost of them actually went five which is great." He felt that presenting students with a required discourse level feature produced better student responses. "I think what helped that by asking them to write 3 sentences even if they were just going to say, spit something out, they had to actually think about it because they knew they couldn't just write one sentence. So I think that helped." He did not find that students used any comparing and contrasting words, the feature of language he had included in his language objective.

I guess in the exit tickets that they don't really reflect that like, "before the Congress of Vienna". It was just like "The congress of Vienna did this" or "This happened" so I guess it wasn't really a true comparison.

He was aware that he had not actually modeled the word or sentence-level features of AE he had identified on the worksheet or in the lesson. He described two changes he could make to supports students' use of features of AE.

So I could have said 'Before the Congress of Vienna, France had territory in Italy whereas after the Congress of Vienna France lost that territory in Italy'. I could have been more specific with my directions on the exit ticket and asked them to use the actual words that I said in [the worksheet].

Felix felt that modeling the sentence structure, as well as providing a written reminder on the exit ticket assignment, would encourage more students to use the language of comparison and, therefore, help them to create stronger comparison sentences.

Despite the fact that Felix explained how he had used the lesson planning worksheet to help him create language-based activities and identify features of AE that he would teach, he still felt that there was a disconnect between being able to identify features of AE and actually teaching those features to students.

I think that it's easy to kind of just fill in the form, fill in the template for the objective and be like, "I'll have them compare and contrast and using these words" or "I'll have them label this and label that" and it's a different thing to teach it.

When asked if there was anything that the teacher education program could do to help him bridge the gap between identifying and teaching AE, he seemed convinced that the responsibility was his. "You guys have shown how important it is. But I guess it's just on me to focus more explicitly on it and incorporate it."

"I think sometimes it's beneficial for all students, but especially students that are ELL or special needs, to see how it's modeled." (Carly)

Carly, in her second pre-practicum placement, was observing and teaching at the same diverse, suburban high school as Felix; she also had the same supervisor. Carly had taken the required course on teaching CLD students in the spring semester of the previous school year, when I was the course instructor. Carly had noticed that there were students with diverse linguistic backgrounds at the school, as she remarked in her interview, "I've noticed there's a high Asian population at that school. I've noticed some kids even in honors and AP classes that struggle with speaking English." Although Carly had asked her cooperating teacher who the ELL students in the class were, as she thought there might be a few, her cooperating teacher had not provided her with that information.

When she was planning this lesson on Shakespearean language for a tenth grade inclusion English class, Carly's cooperating teacher told her "she wanted to practice them using the language, and so I sent back some of my ideas and she picked the two activities that I did in the class." Both of Carly's activities required students to understand or use Shakespearean language. In the first activity, students needed to understand Shakespearean language in order to "retell an excerpt from *Romeo and Juliet* in their own words," which is how the task is described in the first language objective. She did not identify any specific features of AE on her lesson planning worksheet that students would need to use or understand in this activity. Instead, she named the non-specific feature "unfamiliar words" and that students should "derive meaning from the context clues".

However, in her lesson plan, Carly wrote in her lesson plan that she would "project on the board definitions of the 'tricky' words in the dialogue" to help students as they rewrote the scene in their own words. As she had written in the procedure, during the lesson she showed students a Power Point slide with the "tricky" words, which were wherefore, art, thou, thy, wilt, 'tis, and thyself, and their modern-day equivalents; she read these pairs of words aloud to students. On this slide, Carly also provided a definition for the word aside, the only non-Shakespearean vocabulary word she taught during the lesson. She explained to students, "When it says aside on the text sheet, that's a stage direction because it's a play. It pretty much just means that whatever character is talking, we can hear them talk but none of the other characters can hear them talk."

The second language objective written in the lesson plan described the other activity planned for this lesson, in which students "compose their own dialogue using Shakespearean language in pairs by writing a conversation with five lines of dialogue using six of the common Shakespeare words, two pronouns, two adverbs or nouns or verbs, and two greetings." Carly identified the same specific features of AE in the language objective and on the lesson planning worksheet, with one slight change. On the lesson planning worksheet, she named as a word-level feature, "at least six words that were common in Shakespeare's time". However, when this feature was included in the language objective in an earlier draft of the lesson plan, Carly's supervisor told her that this description of the vocabulary could be more specific, so Carly recalled that she "changed it from originally just have them use 6 words to having them use 2 of the different types of words, which was her suggestion." Carly wrote into her lesson

procedure how she would present the features of AE to students before they began the assignment.

I will state the students are again to work with their partner to create a dialogue. This dialogue should consist of two speakers and five lines of conversation. This dialogue should also contain 6 words that are commonly found in Shakespeare plays.

In addition to stating these instructions to students during the lesson, Carly also planned to use an example she created to model the process of creating the dialogues for her students.

Before they get started I will provide a short example for them. I will read the example as a "normal" conversation and then I will state how I changed that to Shakespearean language by consulting my definitions sheet.

When she taught the lesson, Carly introduced the activity to students just as she had explained it in the lesson plan.

So the conversation that you're going to write is going to be between two speakers, you and your partner. And it's going to have to have 5 lines in it. I'll give you this sheet after I explain the directions. And when you write your conversation you want to have at least six of these different words on this list. So it's a really big list so you just have to use six. And try to use 2 pronouns, so those are like the *thy* and *thou* for *you* or *yours*, 2 of the other words that are in the first section, the first set of words, try to use two of those, and 2 greetings because it makes sense usually to say hi to someone at the beginning of a conversation and good bye at the end.

Then she projected two versions of a three-line dialogue that she had written, one in modern language and one using Shakespearean words and phrases. She used a think aloud procedure to explain to students how she translated her original dialogue by substituting the modern words and phrases for words and phrases from the list.

So I used one of the greetings that's on the sheet that says *how fares* and then the person's name. That means "how are you", so I just changed it to "How fares my friend?" And then I looked at the response. *Good* can stay the same. And then on the sheet and it says for *slowly* he uses *but soft*. So it says "How soft doth school seem". *Doth* means *does*, so I kind of had to change the way that I said the second line. It's still basically what I said just using his words. For the third line just "Ay, but perchance it will improve".

Carly had been introduced to think alouds in the course on teaching CLD students, and she explained in her interview that she felt that it was the appropriate scaffold to use to assist the students in this class completing the task.

It actually is a strategy that I learned in that class - the teaching bilingual students one. And I think that it's just a good strategy to use in general because I think that sometimes directions can be confusing, even when you try to write them as explicitly as you can. Then especially with students, I knew that class had special needs and so I thought that it would be beneficial to think to see how I was thinking about the process and how I got the words that I did. I think sometimes it's beneficial for all students, but especially students that are ELL or special needs, to see how it's modeled or how the thinking process that goes behind it so they can have a reference of what to do instead of just directions and trying to

figure out what those directions mean and then figure out how to do it. I think it kind of breaks it down like, this is how you do both of those things.

Carly expressed awareness of the need to provide supports for students in terms of not only content but also language. Knowing that she was teaching students who might have diverse learning needs, she thought that she should provide explicit instruction to make sure that all students could be successful in completing the assignment. She chose to model the procedure for them and present them with an example of the finished product, both of which could provide necessary language support for her students.

After evaluating the conversations that students created during her lesson, Carly felt that students were fairly successful in using the required features of AE. All the dialogues all had five lines, and all of the pairs had used the two greetings and two pronouns, as they were instructed. However, she had noticed that they struggled to use the "other words" from the first section correctly. "Most of them had those types of elements, but as I was reading through them some of them didn't make sense." Carly explained why she thought they might have struggled with this task.

[T]hey didn't understand that they would have to change the structure of the sentence that they wrote in English to fit the word in Shakespearean language, which I tried to model in my think aloud. One of the phrases I had I changed to fit the word. But if they didn't understand how you would change it, they just put the word into the sentence.

She had originally wanted to spend some time during the lesson going over the parts of speech and how they are used in sentences so that students would understand not just that

they needed to use these different types of words in their dialogues but how to use the words correctly. However, she was not able to fit that discussion into the lesson.

I couldn't, when I was planning the lesson, find a good time to incorporate it into that with the content my CT wanted me to cover. But I think that it would have been more beneficial to the students if I had gone over that and knowing more how sentences work and if they have a good understanding of that in English they could better put it into Shakespearean language.

Carly had intended, as she was planning the lesson, to spend more time engaging students in learning about language. She felt that students would benefit from more discussion about language, and students' struggles to integrate the words into correct sentence structures confirmed her belief. If she were teaching this lesson again, she explained, she would break this content into two separate lessons, one on comprehending Shakespearean language and one on using the language, which would allow her time to include the discussion and instruction in how sentences are structured.

Influential Elements of the Teacher Candidates' Experiences

In their interviews, these TCs described elements of their experiences at the university and in the field that had been influential in their planning and teaching process. Figure 5.2 shows how these elements of the TCs' experiences were distributed across the cases of TCs who did and did not teach AE in their lessons.

	Identified specific feature of AE	Taken course on CLD students	CLD students in class ¹	No ELLs in class ¹	Mentor talked about AE	Taught features of AE
Rose	X		X			
Jill	X			X		
Becca	X			X		
Lucas	X					
Liana	X	X^2			X	X
Carly	X	X	X		X	X
Hunter	X	X	X	X	X	X
Felix	X	X	19	X	X	X

Figure 5.2. Influential elements of teacher candidates' experiences.

As Figure 5.2 illustrates, in addition to identifying specific features of AE, TCs who taught AE in their lessons had taken a course on teaching CLD students. Additionally, these TCs described the support they received from a mentor, either a university-based supervisor or a cooperating teacher, in planning and implementing this instruction. Both of these elements of their experiences were cited by the TCs who taught features of AE as being influential in their planning and teaching process.

Course on Teaching Culturally and Linguistically Diverse Students

While completion of the course on teaching CLD students did not seem to have an effect on TCs' ability to identify features of AE, the course did seem to have an effect on TCs' planning and implementation of instruction in AE. Based on data from the TCs' interviews, the course on teaching CLD students seemed to influence their planning and

¹ As reported by the TC.
² Planned and taught with a TC who had taken the course.

implementation of instruction in AE in two ways. First, in the course, TCs learned strategies for teaching AE. All four of the TCs who taught AE implemented strategies that are taught in the course: the think aloud procedure utilized by Carly and Liana, the vocabulary activity implemented by Felix, and the modeling with exemplars implemented by Hunter. Carly was the only TCs who reported that she had learned about the strategy she used in the course, but it is likely that Felix and Hunter learned the strategies they used in the course as well, since those exact strategies are taught. In Liana's case, she herself was not taking the course but she planned and taught with a TC who was. The TCs who had not taken the course were not able to describe any methods for teaching AE. These TCs explained that they would teach AE by showing the expected features to the students or talking about those features during the lesson.

The course also seemed to provide TCs with an understanding that all CLD students, whether they are classified as ELL or not, require instruction in AE. TCs who had taken the course seemed to base their decisions to teach AE on the presence of CLD students, not just ELL students, in their placement classrooms. Carly attempted to gather more information about students' backgrounds when she emailed her cooperating teacher and asked her to identify any ELLs that were in the class she was teaching. Carly made this inquiry because, based on her observation of this class, she thought that there might be ELL students present. When her cooperating teacher did not provide her with any information regarding the presence of ELLs in the class, Carly went ahead with teaching features of AE anyway. Her decision suggested that she understood that working with a diverse group of students, some of whom might be ELLs, would necessitate instruction in features of AE during the lesson. While she did not have access to the type of information

that might have helped her understand each individual student's background, she trusted her own perception of the linguistic diversity of her students and relied on that perception to plan her instruction.

Felix, in his interview, also remarked on the diversity of students in the class he taught. Despite his belief that there were no ELLs in his class, he incorporated instruction in features of AE. As Carly did, he based his instructional decisions on his perceptions of who his students were; his belief that there were students who did not speak English as a first language led him to incorporate features of AE into his history lesson. Both Carly and Felix believed that there were CLD students in their classes who might benefit from explicit instruction in language features and, even though neither of them knew any specific information on the students' linguistic or academic backgrounds, they chose to teach features of AE. Hunter also believed, as Felix did, that he had no ELL students in his class, yet chose to teach features of AE anyway.

Among the TCs who did not teach features of AE, there was little recognition of student diversity, beyond the identification of ELLs, and no discussion of how to support the learning of CLD students. Unlike Felix and Hunter, who chose to teach features of AE even though they believed there to be no ELLs in their classes, Jill and Becca expressed the belief that only ELL students would require language instruction. Since neither believed there to be any ELLs in their classes, they did not teach features of AE. Jill's choice to not include instruction in features of AE is especially problematic, considering the diversity of the student population at her placement school. There were likely CLD students who would have benefitted from instruction in AE in her history class. There appeared to be a few students in Becca's class from diverse linguistic

backgrounds as well. Neither of these TCs seemed to recognize the diversity in their classrooms or express an awareness that students who were not identified as ELLs might still require instruction in AE, based on their linguistic background and experiences. Conversely, Rose knew that there was linguistic diversity in her class, as she said that there were several ELL students present. However, despite her stated knowledge that the ELL students were struggling to complete the activities of the lesson, she did not discuss how she could have supported these students or mentioned that it would be necessary for her to do so.

Support from Mentor in Teaching Academic English

The four TCs who taught features of AE received support and feedback related to teaching AE from either their supervisor or their cooperating teacher as they planned their lessons. For Carly, Hunter, and Felix, support for identifying and teaching AE came from their supervisors. All three TCs discussed the comments related to teaching AE that their supervisors had made on their lesson plans. Their supervisors urged them to include specific features of AE in their language objectives and to explain how they would teach those features to students during the lesson. Carly, Felix, and Hunter reported that their cooperating teachers had offered support related to the content of the lesson only. Felix's cooperating teacher, whom Felix described a "big proponent" of AE, did not offer him any advice on teaching AE. For Liana, advice and feedback on teaching AE came from her cooperating teacher who helped her to identify vocabulary words that would need to be taught and also to enact a think aloud strategy that would help the students to use the designated features of AE correctly. Liana explained that her cooperating teacher was much more involved in the lesson planning process than her supervisor. The support that

these supervisors and cooperating teachers provided to TCs as they planned lessons seemed to provide the TCs with the knowledge and the support they needed to enact instruction in features of AE.

Of the four TCs who did not teach features of AE, two reported receiving very little support or feedback from either their supervisors or cooperating teachers as they planned their lessons. Jill's cooperating teacher gave her a topic to teach but offered no advice on how to teach it, and her supervisor did not help her plan the lesson at all. Becca did not describe any assistance that she received from either mentor. She described her cooperating teacher as very "hands off" and reported that she had seen her supervisor for a total of twenty minutes all semester to that point. Although it is likely that Becca's cooperating teacher gave her some idea as to what content she should teach, she seemed to have received no help other than that in planning her lesson.

For Rose, her cooperating teacher did offer some support in the planning process but ultimately chose to control what Rose taught by altering her lesson plan as she was about to implement it. During the planning of the lesson, Rose's cooperating teacher asked her to incorporate a reading comprehension activity into her lesson on mitosis, but otherwise left her and her fellow TCs on their own to plan a second activity related to mitosis. Rose did receive some support in planning instruction in AE when her supervisor asked her to consider what language other than mitosis vocabulary she should teach. However, Rose seemed to misunderstand what her supervisor meant and explained that she complied with this request by writing the mitosis vocabulary words on the board. When it came time to implement the lesson, Rose's cooperating teacher chose to rearrange the lesson plan that she and her fellow TCs had designed to make the lesson

more similar to one that he would teach, making the reading comprehension activity the focus and relegating the activity that Rose and her group had designed to the "Do Now" portion of class.

Although Lucas did not describe any help or support he received from his cooperating teacher or supervisor, he later admitted that his lesson was planned entirely by his cooperating teacher, who told him to use an activity that he had already created. The only part of the lesson that Lucas himself designed was the exit ticket, which students were not asked to complete during the implementation of the lesson due to his TC's decision to distribute books instead. As was the case with Rose's cooperating teacher, Lucas's cooperating teacher exercised ultimate control over what was taught; he not only planned the lesson but also chose to alter the lesson plan while it was being enacted.

Summary

All eight TCs identified specific features of AE that they could teach to students on their lesson planning worksheets. However, not all of the TCs incorporated features of AE into their lesson plans, suggesting that simply being able to identify features of AE does not necessarily lead to planning and teaching instruction in AE for students. Jill named several specific features of AE on her worksheet that she could have taught to students, but she incorporated none into her lesson plan or her teaching. Conversely, Hunter only named one specific feature on the worksheet and did not incorporate the feature into his lesson plan, but he taught several features of AE during his lesson.

While six of the eight TCs incorporated features of AE into their lesson plans, only three of the six TCs taught these features during their lessons. The three TCs who

did not teach any features of AE during their lessons had only partially incorporated the features, including them in the language objectives but not the lesson procedure. The three TCs who fully incorporated features of AE into their lesson plans by naming features in both the language objectives and the lesson procedure did teach features during their lessons.

Most of the features of AE taught in the observed lessons were word level features. The three TCs who incorporated features of AE into their lesson plans and then taught these features, along with Hunter, who taught features despite incorporating none in his lesson plan, all taught one or more technical vocabulary words to students. These TCs also each included one reference to a discourse level feature that had been taught in the training. Liana and Felix informed students of the amount of language they needed to produce for a given assignment, while Carly and Hunter modeled the organizational structure of the texts that they wanted students to create.

The eight TCs in this sample had a variety of experiences as they planned and taught lessons at their pre-practicum sites, which may account for the variation in their incorporation of features of AE into the planning and teaching of their lessons. The TCs who had taken a course on teaching CLD students (or planned their lesson with a TC who did) and who receive support related to teaching AE from a supervisor or cooperating teacher taught features of AE in their lessons, while those TCs who had neither taken the course nor reported receiving support did not. Hunter, who seemed to have the most difficulty identifying specific features of AE, was encouraged by his supervisor to include features of AE in his language objectives and his instruction. He did not revise his lesson plan based on his supervisor's feedback but still taught three features of AE to

students during his lesson. Liana, Felix, and Carly, who reported working closely with supervisors and cooperating teachers in the planning process, incorporated explicit teaching of specific features of AE identified on their lesson planning worksheets into their lesson plans, and they enacted that instruction when they taught the lessons. Liana, Carly, and Felix were in their first, second, and third fieldwork placements respectively, suggesting that the number of pre-practicum experiences a TC had did not necessarily have an effect on whether they planned and implemented lessons that included teaching features of AE.

Jill and Becca reported receiving little to no help in planning from their supervisors or cooperating teachers. Jill did not incorporate the specific features of AE she identified on the lesson planning worksheet into her planning or teaching of her history lesson, and, although Becca identified one set of specific features on her lesson planning worksheet and incorporated a different set into her language objectives, she taught no features of AE in her lesson. Lucas and Rose incorporated specific features of AE they identified on their lesson planning worksheets into their language objectives, but neither taught these features to students when they taught, as their cooperating teachers made last minute changes that prevented them from executing the lessons as planned.

CHAPTER 6-BREAKING THE CYCLE: PREPARING ALL TEACHERS TO TEACH ACADEMIC ENGLISH

In this chapter, I propose a model of the essential elements that must be provided for TCs by teacher education programs in order for TCs to develop and demonstrate DLK during their pre-practicum experiences. After I explain each of the four elements, I suggest how providing these elements for the teacher educators who work on-site with TCs in their fieldwork placements might serve the dual purpose of supporting TCs' integration of instruction in AE into the lessons they teach in their pre-practicum placements and promoting the academic success of the CLD students currently in school. Finally, I discuss possible topics and populations that should be studied in order to add to the limited body of research that exists in the field of teacher preparation for working with CLD students.

The Essential Elements for Developing Disciplinary Linguistic Knowledge in Pre-Practicum Placements

In this research, I set out to discover what impact a training session in identifying and teaching academic English in content area lessons would have on the development of DLK in TCs who were completing their first, second, and third pre-practicum experiences. I was interested in determining how the training might affect TCs' identification of features of AE, their planning of lessons, and the implementation of the lessons they planned in their fieldwork placement classrooms. In Chapter 2, I explained how this research drew from both the tasks to prepare teachers to teach ELLs proposed by Lucas and Villegas (2013) and the concept of DLK (Turkan et al., 2014). The visual model of this framework is shown in Figure 6.1.

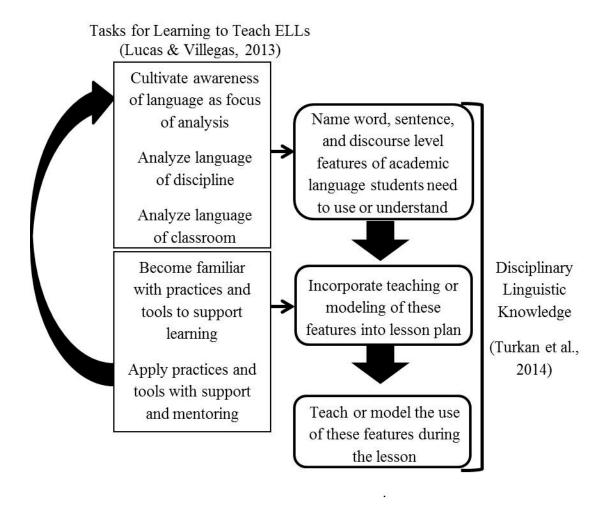


Figure 6.1. A visual model for the development of DLK in a teacher education program¹.

Based on the work of Lucas and Villegas (2013) and Turkan et al. (2014)

In designing this research, I was focused on providing for TCs the knowledge of features of AE and how to teach these features to students. I thought that by providing this knowledge for TCs in the training session, they would develop DLK and demonstrate this knowledge by identifying and teaching features of AE in the lessons they planned and taught in their pre-practicum placements. In analyzing the descriptions of the planning and teaching processes of TCs in the smaller sample, it became clear that TCs who demonstrated both of the abilities that comprise DLK, the ability to identify features

of AE and the ability to model them for students, did plan and implement lessons that included instruction in features of AE. However, while the two-hour training session had some impact on TCs, the training session alone did not contribute to the TCs actually teaching features of AE in their content area lesson. Although I did not set out to study how the structure of pre-practicum experiences impacted the teaching practice of TCs, in the end, the findings of this study suggest that it is both the knowledge and commitment that TCs gained in the training and through university coursework as well as observation of and collaboration with supervisors and cooperating teachers that impacted the planning and teaching that TCs did in their fieldwork placement classrooms. Based on these findings, I created the visual model shown Figure 6.3, which includes these four essential elements for developing DLK in TCs during their pre-practicum placements.

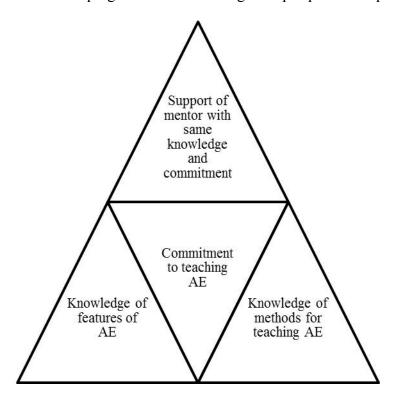


Figure 6.2. Essential elements for developing DLK during pre-practicum placements.

Knowledge of Features of Academic English

In order to teach AE, TCs must be able to identify the features of AE that should be taught to students. As most of the TCs in this sample identified as native English speakers who attended school in the United States, these TCs likely had not engaged in any in-depth study of the English language during their own schooling experiences (Wong Fillmore & Snow, 2000). The training session studied in this research was designed to provide TCs who had no previous experience studying language with knowledge about the register of AE and the features of that register. While a training session as brief as this one could not possibly have provided TCs with all the knowledge about language that they need, TCs' post-test scores were significantly higher after they completed the training. Neither a TC's number of fieldwork experiences, nor completion of a course on teaching CLD students, nor content area was found to have an effect on the TCs' post-test scores, suggesting that it was the training, not other experiences in the teacher education program, which impacted TCs' ability to name features of AE.

On their post-tests, lesson planning worksheets, and lesson plans, TCs identified different types of features of AE at the word, sentence, and discourse level. Similar to the findings of Mitchell et al. (2012) and Homza et al (2014), most of the features that TCs in this study identified were vocabulary words. At the sentence level, TCs were able to create their own sentence frames, demonstrating that they were able to construct the types of sentences that they wanted students to use. At the discourse level, the majority of TCs only identified the number of sentences that students should write when completing a task. The TCs in this study readily identified a small set of features from the training and did not identify the other features that had been presented to them, as the TCs in the study

conducted by Homza et al. (2014) did. In the observed lessons, most of the features of AE taught were technical vocabulary words with a small number of basic discourse level features taught as well.

While the TCs were fairly successful in identifying word level features and certain basic sentence and discourse level features of AE, there are revisions that could be made to the training in order to improve the frequency and accuracy with which TCs identify features of AE in their lesson plans. The training could be revised to include more analysis of the language used in discipline-specific texts and materials, which would allow TCs to practice identifying the features of AE, especially features at the sentence and discourse level, which are likely less familiar to TCs. To allow for the amount and depth of instruction that TCs would require to name features of AE with greater frequency and accuracy, either designing a longer training session or adding another training session might be considered. Also, discipline-specific trainings, in which TCs could be guided to name and describe the features commonly used in their own discipline, might improve TCs' identification of features of AE in their lesson plans. Another option might be to infuse the content from the training into the course on teaching CLD students.

Every TC in the sample named at least one feature of AE that could be taught to students in their content area lesson plan. Even TCs who struggled to formally name or describe features of AE on the lesson planning worksheet or in the lesson plan were still able to recognize language that they would need to teach to students. For example, Hunter, who admitted in his interview that he could not remember what either sentence level or discourse level features were, taught students a discourse level feature in his

lesson. Even though he did not name this feature on his lesson planning worksheet, he understood that the structural elements of a memo needed to be taught to students so that they could complete the activity that he had planned. Ultimately, it is more important that TCs can recognize and teach features of AE than they can name these features. The training helped the TCs to become aware of the language features present in their content area instruction, which is the first step in planning to teach these features to students.

Knowledge of Methods for Teaching Academic English

In the training studied in this dissertation, the brief discussion on teaching features of AE focused only on creating language objectives and designating a place in the lesson where TCs would model or present examples of the use of features of AE. Focusing only on two "high leverage" features from the SIOP model, as Staples and Levine (2014) had discussed in their research, did not prove to be a successful method for preparing TCs to integrate the teaching of AE into their content area lesson plans. Although most of the TCs included language objectives that named specific features of AE in the lesson plans they submitted, very few of the TCs included descriptions of how they would teach or model the use of those features for students. Furthermore, similar to the findings of Wright Maley et al. (2014), in this study, the lessons that TCs implemented were not necessarily the lessons they had planned to implement; even though TCs may have described how they could teach features of AE in their lesson plans, this instruction was not always enacted by the TCs during the lessons. The way in which TCs were instructed to integrate the teaching of AE into their lessons in this training did not seem to be an effective way to impact TCs' inclusion of instruction in AE in their planning or teaching.

Whatever instruction in features of AE was included in the lessons resulted from TCs learning about methods and strategies for teaching AE in the teacher education program's course on teaching CLD students. In this research, as in the studies by Willett & Correa (2014) and Schall-Leckrone & McQuillan (2012), TCs who had both knowledge about features of AE and knowledge of practical strategies for teaching those features to students felt more prepared and were more likely to plan and implement instruction in AE. The intervention did not provide TCs with specific, practical strategies they could use to teach AE, but the course on teaching CLD students did. The four TCs who did teach features of AE in their lessons taught these features using strategies that are taught in the course. The four TCs who did not teach language, when asked how they might integrate language teaching into their lessons if they were to teach the lesson again, did not name any specific methods or strategies that they could use to teach language. They suggested that they would either write the features on the board or in the directions or that they might just say them aloud. Since none of these four TCs had taken the course yet, they were not familiar with the methods for teaching language that the other TCs implemented in their lessons.

Commitment to Teaching Academic English

Instilling in TCs a commitment to teaching AE was not an explicit focus of the training. There were only two brief references made to the necessity of teaching both the language and the content of the lesson in the training. This notion was mentioned in the discussion of the graphic in which language is represented as a barrier to content learning and again in the presentation of the WIDA standards, in which learning the language of all content areas is described as a necessary aspect of the education of ELL students. The

lack of an explicit focus on the reasons that all teachers should teach features of AE in their lessons may have not only resulted in fewer TCs expressing this commitment but also perpetuated among the TCs the belief that teaching features of AE is necessary only when working with ELL students.

TCs who did demonstrate a commitment to the teaching of AE were those who recognized that there were CLD students present in their classes and that there was a need to design appropriate instruction for those students. Although this research focused only on engaging TCs in a subset of the tasks related to identifying language demands and scaffolding instruction, there is an element of linguistically responsive pedagogy that may be seen as providing a link between these two abilities, "an understanding of the importance of learning about students' language backgrounds and the skills to do so" (Lucas & Villegas, 2011, p. 304). In order to decide how best to scaffold instruction to support students' use or understanding of the features of AE they identify in their lessons, teachers must be aware of their students' linguistic backgrounds. Knowledge of students' language backgrounds provides teachers with information that helps them to design appropriate instruction for those students. TCs in the smaller sample who acknowledged the presence of CLD students in their classes and who discussed the need to design instruction in AE for CLD students did choose to teach features of AE in their lessons. This finding suggests that the commitment to teach AE may be rooted in this understanding of the importance of knowing students and designing instruction that best supports the learning of those students. For Carly, Felix, and Hunter, development of this understanding seemed to take place in the course on teaching CLD students.

Liana also demonstrated that she understood how knowing students' backgrounds was an important aspect of planning and implementing lessons, but her understanding seemed to come not from coursework but from her own experience as a bilingual learner. She explained that she incorporated language instruction into her lesson because she understood, as she said, how language could "block the content". During her time as an ELL student, Liana had found language to be a barrier to learning. This experience had provided her with an understanding of the relationship between learning content and learning language, an understanding that native English speaking TCs do not necessarily develop during their own school experiences (Alger, 2007; deJong & Harper, 2005). Lucas and Grinberg (2008) suggested that teachers' experiences studying a second language might "give them insight into the language learning process and the experiences of their students" (p. 611). It seemed that Liana's insight had helped her to recognize the importance of teaching both language and content to support the learning of students from diverse linguistic backgrounds. Liana also expressed empathy for the difficulties that CLD students in mainstream classes may experience, as she had transitioned from an ESL to a mainstream class as an elementary school student. As she told the story of her own feeling of embarrassment over not knowing how to spell a word once she had transitioned to the mainstream class, she explained that this experience had shaped her approach to teaching, prompting her to be more aware of the language challenges that CLD students may face. While Liana, like Carly and Felix, did not have specific information on her students' backgrounds, she did demonstrate some understanding that students' backgrounds play a role in what they learn and how they learn. This recognition of the diversity in students' backgrounds and of the effect that those backgrounds might

have on students' learning illustrated that these TCs were at least beginning to understand the importance of knowing students' experiences and planning lessons that take these experiences into account. This understanding is very similar to the second of the six principles of student teaching for social justice set forth by Cochran-Smith (1999), which stated that TCs should "build on what students bring to school with them: knowledge and interests, cultural and linguistic resources" (p. 118). In displaying their commitment to learning about their students' linguistic experiences and creating lessons that supported their students' development of proficiency in AE, these TCs were illustrating this principle of student teaching for social justice.

Hunter presented an interesting case, as he knew there were no ELLs and perceived there to be little diversity in the linguistic backgrounds of his students, which, based on his placement site's demographic information, was likely an accurate perception; yet he did choose to incorporate instruction in features of AE into his lesson. It is difficult to determine if Hunter was developing a commitment to teaching AE, since he did not express any thoughts or beliefs about the needs of CLD students. It is possible that he did not address this topic in his interview because he was not working with a diverse student population at his placement site during that semester.

Jill and Becca expressed the opinion that teaching AE was only to be implemented in classes with ELL students. It appeared that they had not developed the understanding that students other than ELLs may have diverse linguistic backgrounds and experiences that might make instruction in AE necessary. Rose, who knew that there were ELL students in her class, did not express the belief that she would need to support or assist these students in some way in order for them to be successful in the mainstream

classroom. Rose's experience illustrated that a commitment to teaching AE is not based solely on the recognition of linguistic diversity among students but also on the understanding that the teacher must design instruction that supports the achievement of diverse learners.

Based on the findings of this research, it seems that instilling in mainstream TCs a commitment to teaching AE in every lesson begins with helping TCs to recognize and learn about the diversity in students' backgrounds. As the cases of Jill and Becca illustrated, TCs may think of ELLs as the only students in need of language instruction and not acknowledge the presence of other students with varied linguistic backgrounds. Additionally, TCs must develop an understanding of how instruction in AE supports the academic achievement of CLD students in mainstream classes. As TCs recognize the need to learn about and use students' backgrounds to plan their instruction, they move toward a more socially just way of teaching. Recognizing the importance of knowing CLD students' language backgrounds and planning appropriate instruction for CLD students may be developed through coursework, as in the cases of Carly and Felix, through reflection on one's own experiences as a language learner, as in Liana's case, or perhaps both.

Support of Mentor with Same Knowledge and Commitment

Another factor that influenced TCs beyond the training was their access to mentors who could assist them in applying these strategies in practice, as researchers in previous studies had discovered (Schleppegrell et al., 2008; Wright-Maley et al., 2014; MacDonald et al., 2014; Homza et al., 2014). The experiences of the eight TCs in the smaller sample illustrate what Feiman Nemser and Buchmann (1985) described in their

work on the three "pitfalls of experience". Feiman Nemser and Buchmann (1985) named these three pitfalls the "two worlds" pitfall, the "familiarity" pitfall, and the "cross purposes" pitfall.

The "two worlds" pitfall "arises from the fact that teacher education goes on in two distinct settings and from the fallacious assumption that making connections between these two worlds is straightforward and can be left to the novice" (p. 63). In order to overcome the "two worlds" pitfall, TCs need support and assistance to understand how the knowledge that they are learning through coursework should be applied to the actual practice of teaching. For this reason, TCs require supervisors familiar with the AE of their academic disciplines who can provide them with "intensely supervised clinical work" in which they learn to apply their knowledge about teaching AE to their own discipline-specific practice (Darling Hammond, 2006, p. 307). In this research, active support from a supervisor or CT appeared to affect TCs' incorporation of the teaching of AE into their lessons: TCs who received feedback related to language teaching from a supervisor or CT did teach language in their lessons, while TCs who did not receive this type of feedback from either a supervisor or CT did not integrate any language teaching into their lessons. The supervisor or cooperating teacher who provided the support shared the TC's knowledge about identifying and teaching AE and the commitment to teaching AE in every lesson.

The supervisors and cooperating teacher who provided this support to TCs were knowledgeable about planning and implementing language instruction. The supervisor who worked with Carly and Felix taught the course on teaching CLD students and Hunter's supervisor had worked on a previous research study of TCs' ability to identify

features of AE in content area texts. Both supervisors had the knowledge about identifying and teaching AE that would be necessary for supporting the TCs as they applied their knowledge to their teaching practice. Although I did not know anything about Liana's cooperating teacher's background, from Liana's description of the feedback she was given on the lesson plan, it seemed that her cooperating teacher also had some knowledge of features of AE and how to teach them.

Additionally, TCs who taught features of AE worked with supervisors and cooperating teachers who demonstrated a commitment to integrating language instruction into all content area lessons. Hunter's supervisor, who was aware that there were no ELLs in the class that Hunter was teaching, still provided Hunter with feedback on his lesson plan in which he pushed Hunter to consider what features of AE he should be teaching to students to help them complete the activity he planned. Drawing Hunter's attention to language, even when the class was comprised of native English speakers, reflected this supervisor's strong commitment to integrating language instruction in all content area lessons. Felix reported observing his CT discussing language with students in his history lessons, a choice which he felt demonstrated his CT's belief that teaching language was an important aspect of teaching history.

In this research, TCs received active support from only one person, either a supervisor or a cooperating teacher, as they planned and implemented lessons in which they taught features of AE. While the support of one individual did make a difference, the fact that both individuals did not necessarily support the TCs' planning and teaching of AE may have affected the depth of instruction in AE provided for students. Carly expressed a desire to focus more on teaching students the correct usage of the features

she identified in her lesson, which she felt might have made students even more successful in completing the assignment she designed. Carly's supervisor helped her to incorporate some language instruction into the lesson, but her cooperating teacher had asked her to cover a certain amount of content, which Carly felt precluded her from providing as much language instruction as she felt would be necessary. If Carly, her supervisor, and her cooperating teacher had agreed on the amount of language instruction that students would need to complete the assignment successfully, then Carly could have integrated more language instruction into her lesson, as she felt that she should have. A TC would benefit from working with both a supervisor and a cooperating teacher who knew how to identify and teach features of AE and supported TCs' integration of the teaching of features of AE into every content area lesson.

The support of a supervisor or a cooperating teacher who helped the TCs to integrate the teaching of AE into their lessons allowed TCs to overcome the "two worlds" pitfall. However, the TCs who did not receive this type of support were not only unable to avoid the "two worlds" pitfall but were also unable to avoid one of the other two pitfalls of experience (Feiman Nemser and Buchmann, 1985). Jill and Becca, who received help only in determining the content they should cover, planned and taught the types of lessons that they had experienced in their own schooling, an example of the "familiarity" pitfall. These lessons reflected none of what the TCs had learned about teaching AE in the training session.

At the other end of the spectrum, Lucas and Rose, at the urging of their cooperating teachers, replicated the exact practices that those teachers enacted in their classrooms. The experiences of Rose and Lucas illustrated the "cross purposes" pitfall.

Classrooms are not designed to be sites in which TCs can learn to teach and, as such, the goal of helping TCs learn to teach is subordinated to the desire of cooperating teachers to maintain the routines and practices that they have established for their students (Feiman Nemser & Buchmann, 1985). TCs were instructed to enact their cooperating teachers' teaching practices uncritically, a danger of fieldwork experiences highlighted by Sleeter (2008) who warned that teacher education programs must be careful to prepare teachers "who do not simply replicate prevailing practices" (p. 568). In the cases of Jill, Becca, Rose, and Lucas, a vicious cycle in teacher preparation was repeated, a cycle in which TCs continue to enact the teaching practices currently accepted in school, most of which offer to CLD students no opportunities to learn AE and improve their educational outcomes.

It is perhaps this cycle of replicating the teaching practices that one observed in their own experience or in their cooperating teacher's classroom that is responsible for the lack of evidence that the number of fieldwork experiences had any effect on TCs' planning or implementing instruction in AE. If, in their pre-practicum placements, TCs are simply replicating the practices they have witnessed in their time as students and student teachers, then they would likely not implement instruction in features of AE, regardless of how many field experiences they have completed, since they have not been exposed to this type of instruction in classrooms. The pattern that emerged in this study, in which TCs in their second and third fieldwork experiences were no more likely to plan and teach features of AE and, in fact, TCs in their third placement were more likely to submit lesson plans with no incorporation of what was taught in the training, may be connected to the fact that most of the TCs did not observe teachers who incorporated the

teaching of AE into their lesson plans and, as students themselves, TCs likely did not receive instruction in AE either. The number of fieldwork experiences might become a factor in TCs' planning and implementation of instruction in AE if TCs were able to observe cooperating teachers who also planned and implemented instruction in AE in each of their placements or if more TCs entered their fieldwork placements having received instruction in AE during their time in school.

In the same way, in this research, content area was not a factor that impacted the planning and implementation of instruction in AE. English TCs were no more likely to identify and plan to teach features of AE than TCs in history, math, biology, or foreign language, probably because, in every content area, most of the TCs did not observe their cooperating teachers implementing instruction in AE. Similar to the findings of Meyer (2013), who determined that English teachers were no more knowledgeable about teaching literacy than their social studies or science colleagues, this result refutes the idea that English teachers are more prepared to teach language simply by virtue of teaching in a content area that may seem more related to language that others. In order for TCs to plan and implement features of AE in their content area lessons, they need support from mentors who both assist them in applying their knowledge about AE and teaching AE to their content area lessons and model this type of instruction in their own practice.

Implications for Practice

The findings of this study suggest that teacher education programs should be designed to provide TCs with access to all four elements for preparing teachers to teach AE. The training session described in this dissertation provided TCs with some knowledge on identifying features of AE, but TCs need more instruction in and practice

with identifying features of AE. Infusing knowledge about features of AE into multiple courses in the teacher education program might both improve and strengthen TCs' ability to identify the linguistic demand of their lessons.

In this research, the course on teaching CLD students provided TCs with knowledge of strategies for teaching AE and the understanding that teaching AE is necessary to promote the success of all students, not just ELL students. Teacher education programs which already require TCs to take a course of this type could review the syllabus to determine if these elements are covered in the course and revise the syllabus if these were determined not to be present. In teacher education programs that do not require such a course, these elements should be infused into the content of other required courses in the program to ensure that TCs are developing this knowledge and understanding.

Teacher education programs must also provide TCs with access to the fourth element from this model, supervisors and cooperating teachers who have developed the same knowledge of and commitment to teaching AE that the programs aim to develop in TCs. Additionally, just as TCs need the support and mentoring of more experienced others in learning to apply what they have learned to their teaching practice, so do the supervisors and cooperating teachers who work with TCs in their fieldwork placements. For this reason, teacher education programs should provide professional development opportunities for supervisors and cooperating teachers to develop knowledge of features of AE, knowledge about teaching AE, and a commitment to teaching AE, as well as support from other teacher educators in applying this knowledge to lesson planning and teaching and in assisting TCs as they do the same.

As Darling Hammond (2006) wrote, "[i]t is impossible to teach people how to teach powerfully by asking them to imagine what they have never seen or to suggest they 'do the opposite' of what they have observed in the classroom" (p. 308). In this study, TCs who were supported in their attempts to enact instruction in features of AE did do so, and TCs who were left to "imagine" what that sort of instruction would look like did not. Although, by chance, some of the TCs in this study worked with supervisors or cooperating teachers who had the knowledge and the commitment to help them integrate the teaching of features of AE into their content area lessons, this important element of preparing TCs to teach AE in their pre-practicum placements can not be left to chance. Until all parties are prepared to implement the teaching of AE, the cycle of disadvantaging learners of AE in mainstream classrooms will continue.

Providing supervisors and cooperating teachers with access to the four elements shown in the model will not alter the cycle in which TCs replicate the practices that they have observed as students and student teachers. However, if supervisors and cooperating teachers learn to identify and teach AE, and are committed to doing so in every lesson, it is more likely that the practices TCs reproduce will reflect a vision of good teaching in which AE instruction is a feature of all mainstream classrooms. The assistance of well-prepared supervisors and cooperating teachers would help TCs to avoid the "pitfalls of experience" that some of the TCs in this research could not overcome (Feiman Nemser & Buchmann, 1985).

One of the features of effective teacher education programs, according to Darling Hammond (2006), is "a common, clear vision of good teaching" that pervades both coursework and clinical experiences (p. 305). When teacher education programs embrace

a vision of good teaching that includes instruction in AE in all mainstream classes, that vision should be shared with the mentors who assist TCs in learning to teach in the field, not just imparted to TCs through their coursework. This research highlighted the need for teacher education programs to provide opportunities to gain knowledge about language and language teaching for supervisors and cooperating teachers. Supervisors and cooperating teachers, like the TCs with whom they work, must learn about the register of AE and the features of AE at the word, sentence, and discourse level that recur in the texts and activities common in content area classrooms. They also must know how to plan and implement effective practices for teaching AE, such as modeling, think alouds, and vocabulary learning strategies.

This research also highlighted the importance of building an understanding in all teachers that teaching AE is neither a "pedagogical adaptation" necessary only for ELLs (deJong & Harper, 2005) nor an "add-on requirement for dealing with 'those students' outside the mainstream" (Valdes et al., 2005, p. 161). As teacher education programs provide knowledge about identifying and teaching AE to supervisors and cooperating teachers, they must also develop in these mentors an awareness that the teaching of AE is the responsibility of all mainstream teachers, based on the notion that learning a discipline requires knowing both the content and the language of the discipline. Both TCs and cooperating teachers in this study expressed the belief that teaching AE was not necessary when there were no ELLs in the classes they were teaching. Breaking the cycle requires that all teachers, pre-service and in-service, are aware of their responsibility to teach the AE of their discipline to support the academic achievement of all students. It is the responsibility of teacher education programs to assist supervisors and cooperating

teachers in developing the ability to identify and teach features of AE and an understanding of the necessity for teaching AE in all mainstream content area lessons. Teacher education programs can present this content to supervisors in the training sessions and meetings that they are required to attend while they are supervising TCs. Additionally, teacher education programs should work together with the school systems in which they place TCs to provide for in-service teachers this same knowledge about and commitment to teaching AE. It may be more challenging for teacher education programs to provide this content to cooperating teachers, because, unlike supervisors, cooperating teachers are usually not required to attend training sessions or meetings with other teacher educators as part of their work with TCs in their fieldwork placements. For this reason, it is imperative that programs work with the school systems in which their TCs are placed to create opportunities for cooperating teachers to learn about the program's vision of good teaching. Cooperating teachers should at least be provided with the materials from training sessions or courses in which TCs learn to identify and teach features of AE so that they understand what TCs are being asked to do in their lesson plans. Teacher educators should also offer training sessions on identifying and teaching AE as a professional development course for cooperating teachers at the schools in which they work, as in the study conducted by Homza et al. (2014). Offering and incentivizing professional development on identifying and teaching features of AE for cooperating teachers would better prepare these teachers to support TCs with whom they work and allow them to earn professional development points for re-licensure.

Just as TCs need support in applying what they learn about AE to their planning and teaching process, supervisors and cooperating teachers will also need the support of

more experienced others who can assist them in planning and implementing instruction in features of AE. One-on-one coaching or small group work with a teacher educator who is knowledgeable about teaching AE was found to be helpful for teachers who were learning to identify and teach features of AE (Homza et al., 2014; Willet & Correa, 2014; MacDonald et al., 2012). University teacher education programs should require that supervisors receive this type of coaching and support during the training sessions that they are required to attend. Cooperating teachers must be provided with this support from coaches as part of a larger professional development initiative aimed at preparing them to mentor TCs.

One method for making certain that TCs work with cooperating teachers who share the knowledge of and commitment to teaching AE might be the establishment of a professional development school. In professional development schools, as Hammerness and Darling Hammond (2005) explained, "university- and school-based faculty work collaboratively to design and implement learning experiences for new and experienced teachers" (p. 414). This type of model would allow for university-based teacher educators who are knowledgeable about AE to provide both TCs and teachers with training in identifying and teaching features of AE. Moreover, the close link between the university and the school would allow for the shared vision of good teaching, namely the teaching of AE in every content area, to be more coherently enacted and demonstrated across university coursework and field experiences.

The state in which the study was conducted now requires teachers of core academic subjects in public schools to complete a specific, state-designed course in delivering sheltered instruction in order to maintain their teaching license. However,

these teachers will still need coaching and support to apply what they learned in the statedesigned course to their teaching practice. Although the ways of discussing and teaching AE enacted in this course may be different than the ways this content is taught in teacher education programs, the course does provide teachers with some knowledge about AE. As teachers complete this required course over the next few years, it may be that more cooperating teachers at TCs' fieldwork placement sites will be more knowledgeable about how to integrate language teaching into lessons and more able to offer support to TCs in planning and implementing lessons that include effective methods for teaching features of AE. Teacher education programs should still provide additional professional development and coaching for cooperating teachers to assist them in applying what they learned in the course in their own classrooms and in guiding TCs to do so as well. Cooperating teachers who are knowledgeable about identifying and teaching features of AE are better able to support TCs as they attempt to apply what they know about language and language teaching to their own planning and teaching of content area lessons. These cooperating teachers would also be better prepared to work with the CLD students in their own classes as a result of engaging in this professional development and coaching.

As TCs progress through the teacher education program, they learn as much or more about teaching from the supervisors and cooperating teachers at their fieldwork placement sites as the teacher education faculty who teach their courses. These individuals should be viewed as teacher educators; yet they do not receive support or compensation from teacher education programs that reflect the amount of responsibility with which they are entrusted (Feiman Nemser & Buchmann, 1985; Clark, 2002;

Zeichner, 2010). Teacher education programs should provide their supervisors and cooperating teachers with professional development opportunities that will help them to grow as teacher educators and to assist the TCs with whom they work in adopting effective teaching practices that support the academic achievement of all students. Additionally, offering this type of professional development and coaching to cooperating teachers may help them to plan and implement effective instruction in features of AE, instruction that will benefit the CLD students in their classes. While supporting the development of cooperating teachers is important for the purposes of teacher education, it may also provide an immediate change in the way that cooperating teachers teach, promoting a necessary improvement in the way that CLD students are educated in mainstream classrooms.

Implications for Research

The results of this study provided an in-depth look at the development of disciplinary linguistic knowledge in a small sample of secondary TCs in one teacher education program. More research on the development of language knowledge involving larger groups of TCs with more diversity in terms of content area and grade level taught, as well as longitudinal studies focused on individual TC's development of language knowledge during their time in teacher education programs, is necessary. There is also a need for research on what the supervisors and cooperating teachers who work with TCs in their fieldwork placements know about teaching AE and how initiatives designed to provide them knowledge about teaching AE impact their work with TCs. Also, studies of novice teachers' integration of the teaching of AE into their practice could show how TCs apply what they learn in teacher education programs once they enter the field.

Studies of larger and more diverse groups of TCs as they develop knowledge about language and learn to apply that knowledge are needed. The sample population of this study was not particularly diverse in terms of content area, with mostly English and history TCs represented. Studies that include more math and science TCs, as well as TCs in the arts, physical education, and vocational subjects are necessary, as teachers in all content areas are responsible for the success of CLD students. In this research, the focus was on secondary TCs, but studies of elementary TCs learning to identify and teach AE might illustrate the similarities and differences in the development of DLK in these different populations. Research that includes more diverse groups of TCs would provide a wider view of how knowledge about language and language teaching can be developed in teacher education programs, as these programs work toward preparing all teachers to teach CLD students.

The development of DLK throughout the teacher education program should be studied as well. Longitudinal studies to determine the TCs' ability to identify and teach the academic language of their discipline at various points in their preparation would aid in evaluating and revising the design of courses and experiences in which TCs learn about teaching language. Although this study did not find much difference in the identification and teaching of features of AE between groups of TCs at differing points in their teacher education program, tracking individual TCs as they progress through the teacher education experience might provide researchers with a better opportunity to recognize patterns in TCs' development of these abilities. Examination of these patterns might lead to discussion of a possible trajectory for learning about language in the teacher education program, as well as during the induction years and beyond.

The supervisors and cooperating teachers who mentor TCs in their fieldwork placements were likely not provided with the opportunity to develop DLK as they completed teacher education programs. It is imperative that these populations receive training and support in the identification and teaching of AE, along with opportunities to develop an understanding of the necessity of teaching AE for CLD students. There is a need for researchers and teacher educators to design innovative initiatives and methods for providing this knowledge to these populations. Descriptions of the methods implemented and empirical research on the effectiveness of these methods, in action research studies as well as through school university collaborative research projects, would add to the limited research in the field of the preparation of all mainstream teachers to teach the AE of their disciplines.

Supervisors are an interesting population to study, as the people charged with supervising TCs may be teacher education faculty, graduate students, or retired teachers or administrators. Members of these groups might have very different experiences and knowledge in terms of working with CLD students and teaching AE. Research on what members of these groups know would be very informative in terms of assessing the extent and the type of training that would best suit the supervisor population at specific teacher education programs.

Research into what cooperating teachers know about language and language teaching would prove invaluable as teacher education programs attempt to provide TCs with supportive mentors from whom to learn about the practice of teaching. As I mentioned in the previous section, teachers in the state in which I conducted this research are now required to take a course in delivering sheltered instruction. The effect that the

course has on cooperating teachers' identification and teaching of AE in their own lessons and the support they can offer to TCs as they plan and teach lessons should be studied. Also, any efforts initiated by teacher education programs to supplement what teachers are learning in the course as a means to improve the support these teachers can provide for TCs should be studied.

As this research illustrated, some TCs are receiving little to no support from mentors during their fieldwork experiences. Interviewing TCs who have experiences such as the ones described in this research, in which supervisors and cooperating teachers do not offer assistance to TCs as they plan and teach lessons, and asking them what they would do, if they were cooperating teachers, to help the TCs teach AE. Also, as teacher education programs integrate opportunities for TCs to learn to identify and teach the AE of their discipline, more teachers will enter the field with some previous knowledge about teaching AE. There is a need to determine if these teachers apply this knowledge to their own teaching practice once they are in charge of their own classrooms. Research should be conducted on the extent to which novice teachers integrate instruction in AE into their lessons once they are teaching in the field. Additionally, it would be important to determine which factors influence their decisions regarding the implementation of this type of instruction. Schall-Leckrone's (2012) research found that novice teachers who graduated from a teacher education program in which they learned to identify and teach AE did not consistently do so in their planning and teaching of secondary history lessons. Research is needed to determine the reasons for this inconsistency in implementing instruction in AE and what supports and additional knowledge or skills should be offered to ensure that teachers identify and teach AE more consistently in their content area

lessons. Also, as teachers who attended teacher education programs in which they were provided with opportunities to develop DLK enter the field, these teachers may choose to become cooperating teachers. Studies should be conducted on the effectiveness of these teachers as mentors in terms of modeling instruction in AE for TCs and supporting TCs in implementing this type of instruction.

Limitations of the Study

This research was conducted with a small group of participants in a small teacher education program. The participants were not particularly diverse in terms of either the number of fieldwork experiences they had completed or the content area in which they taught. As the sample population was comprised of mostly English TCs in their second field experience, the results of this study may be more indicative of the experiences of that population of TCs and not the overall population of TCs at this university.

Additionally, the study, although it included a comparison of TCs' identification, planning, and teaching of features of AE with different levels of fieldwork experience, was not longitudinal. As the TCs were not being compared to themselves at various points in time but instead, different groups of TCs were being compared to one another, it is difficult to draw conclusions from this study about how the TCs may develop DLK over the course of their field experiences.

The study focused on the effect of the intervention on TCs, so I did not collect data from other populations with whom the TCs came into contact. No student work was collected. Therefore, the statements related to students' ability to use or understand the features of AE during the lesson are all based on the TCs' perceptions, not the researcher's analysis of student work. The students' attainment of the features of AE they

were taught was, therefore, difficult to measure accurately. The TCs' supervisors and cooperating teachers were not interviewed or in any way observed in this study. No background information was collected from any of the supervisors or cooperating teachers. Descriptions of the interactions between these mentors and the TCs were all provided by the TCs themselves, and any background information about the supervisors or cooperating teachers was supplied by the TCs or by me, since I was personally acquainted with two of the supervisors in the program. The limited amount of information I had on these mentors did not allow for more exploration or investigation of their knowledge about or commitment to teaching AE.

Conclusion

Culturally and linguistically diverse students cannot change their prior socialization in a particular culture or in a particular language. Instead, the system must adjust its practices, build capacity for diversity, and professionally accommodate these differences. Inevitably, the policies and infrastructures of the institution we call schooling must change to accommodate the changing foundation upon which their existence rests. However, changes must also begin with the educators who deliver the services of this institution in society.

(Committee on Multicultural Education, 2002, p. 6-7)

As the Committee on Multicultural Education (2002) warned, denial of equitable educational opportunities to the growing numbers of CLD students in American schools is both a violation of these students' civil rights and an institutional failure.

Unfortunately, as long as TCs replicate the practices of their cooperating teachers and their cooperating teachers do not model effective practices for teaching CLD students,

such as explicit instruction in features of AE, there will be no change in the teaching practice of teachers in mainstream classrooms. While teacher education programs are beginning to integrate knowledge about teaching AE into the coursework that TCs complete, every individual who works with TCs, especially the supervisors and cooperating teachers who guide TCs to implement what they are learning, need opportunities to learn about and practice identifying and teaching features of AE. Currently, the majority of supervisors and cooperating teachers are not equipped to provide to TCs the support they require to integrate the teaching of features of AE into their mainstream content area lessons.

To break the cycle of school failure for CLD students, universities and school districts should work together to develop in all teachers the knowledge and understanding necessary to provide instruction in AE. TCs must be supported in their efforts to integrate the teaching of AE into the lessons they teach in their fieldwork experiences. This support can only be provided by on-site teacher educators, that is, supervisors and cooperating teachers, who themselves have knowledge about teaching AE and the understanding of the responsibility of all teachers to provide instruction in AE. Offering professional development initiatives designed to build this knowledge for in-service teachers would serve to both assist these teachers in integrating the teaching of AE into their own classrooms and in supporting TCs as they integrate the teaching of AE into their lessons in those classrooms. Through the coordinated efforts of teacher education programs and local school districts, all teachers, in-service and pre-service, should be provided with opportunities to develop DLK and apply this knowledge to their teaching practice.

To be successful in school, CLD students need teachers who can provide them with instruction in AE. Most teachers currently working in schools are not prepared to teach the AE of their disciplines. Neither are most of the TCs graduating from teacher education programs. A change needs to be made, a change that leads to improved educational outcomes for CLD students. That change must begin in teacher education programs. It is the responsibility of these programs to prepare the teachers of tomorrow for the students that will populate their classrooms. However, the CLD students of today can not wait for those new teachers to take over and provide them with equitable access to the content through language instruction. By providing opportunities for in-service teachers to develop the DLK necessary to teach AE in their mainstream classes, teacher education programs can ensure that the change begins now.

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APPENDIX A

Description of the Training Session

The training began with an explanation of the five objectives for the session:

- 1. To recognize the concept of register in language.
- 2. To learn about the register of Academic English and some features of AE.
- 3. To identify the AE that students need to use and understand in the content area lessons they brought.
- 4. To write language objectives based on the features of AE they identified.
- 5. To decide where in the lesson they will teach the language.

The description is divided into five sections. Each section explains the content and activities used to support the attainment of one of these five objectives.

Recognize the Concept of Register in Language

The first activity involved introducing the TCs to the concept of register through an activity created by Kevin O'Connor, who facilitated the earlier versions of these trainings. Small groups of TCs were assigned a role, an audience, and a context and are asked to express the same idea ("I don't know the answer. Please don't ask me.") using language appropriate for situation. The situations varied widely: a waitress in a crowded restaurant talking to a customer, a student answering a teacher's question in a class, a person in a job interview speaking to his/her prospective boss, a politician at a press conference. As each group presented their way of expressing the idea, I commented on the language features they chose to include and compared their choices based on their situations. I guided the students to explain what made the language choices appropriate for each situation. After we discussed the language choices each group made, I explained that the examples they generated illustrate different registers, which are types of language adapted to a context. I continued with the idea that, although in each situation there is a most appropriate language, there is no one correct register. All of us come to school with

a number of various registers that work well for us in our various contexts. I told them that the expected register of school is called Academic English (AE).

Learn about the Register of Academic English and Features of AE

To define AE, I used Zwiers' (2007) definition: "the set of words, grammar, and organizational strategies used to describe complex ideas, higher-order thinking processes, and abstract concepts" (p. 20). This definition was used because it set up the discussion of the features of AE at the word, sentence, and discourse level. I then explained that AE is very different from many other registers of English used in other contexts; some students are exposed to AE outside of school and some are not, which means that they will need to learn AE in school. These students who need to learn AE know and use many other registers that they use in the contexts of their lives, so what teachers need to do is to help them add the register of AE.

Then I showed an animation created by Kevin O'Connor to illustrate why teaching AE is necessary for teaching content. In the first slide, the transparency of language for native speakers is represented by a circle, labeled AE, that disappears to reveal a box behind it that says *Mathematics*. This animation showed that native speakers are not prevented from learning content material by their language ability, because they are proficient in English, specifically AE. On the next slide, the same image is shown, but the circle labeled AE does not disappear, creating a barrier between CLD students and learning content. Then I told the TCs that students who are not proficient in AE may either learn content and not be able to demonstrate their knowledge to teachers or may not be able to access the content at all. For this reason, all teachers must be prepared to recognize and teach the AE present in their content area lesson.

In the next part of the training, I presented them with explanations and examples of features of AE at the word, sentence, and discourse level. The terminology used to refer to the levels and features were drawn from the documents created by WIDA Consortium. I explained the labels of the three levels (Vocabulary Usage, Language Forms and Conventions, and Linguistic Complexity) and provided examples of features at each level. Vocabulary Usage refers to word-level features including three types of vocabulary. General vocabulary includes words used in everyday contexts. Specific vocabulary words are those that are used in a certain content area. Specialized words pertain to material in one specific concept presented in one unit. Language Forms and Conventions is the name that WIDA gives to sentence-level structures. Any type of grammatical or syntactical construction as well as conventions, such as punctuation or capitalization, fall under this category. I engaged students in a brainstorm to think about what are some of the features that are important to writing a correct sentence. Typical responses included verb forms or tenses, nouns, article use, commas, and periods. If I did not hear these responses, I suggested them in addition to whatever the TCs brainstormed. Linguistic Complexity encompasses the discourse level features of AE. WIDA includes amount and quality of language as well as coherence, in this category. The example of this I always provided for TCs was the typical paragraph structure taught to students. In a typical, five sentence paragraph, there is a topic sentence that introduces the main idea of the paragraph, three sentences that contain ideas or details to support the topic, and a concluding sentence to sum up the paragraph. There is a specified amount of language (five sentences) and an expected organization (topic sentence, three details and a conclusion). I explained that the paragraph might have even more discourse features,

such as words that show the organization, like sequence words or logical connectors. The amount, organization, and possible organizational signals are all discourse level features of AE. I explained to TCs that we would conduct a more specific analysis of the features of AE present in the content area lessons they brought with them.

Identify the AE that Students Need to Use and Understand in Content Area Lessons

I gave each TC a lesson planning worksheet that they would use for the analysis of their own content area lesson (see Appendix C for lesson planning worksheet). I explained that the rest of the training would involve me modeling the process represented on the worksheet. I told them that I would do each step on chart paper so that they could see what each step entailed. After I modeled each step, they used the worksheet in front of them to do the same step with their own content area lesson. I modeled each step of the worksheet with a sample Chemistry lesson that a TC gave me consent to use several years ago. I used this lesson plan because it had many instances in which students need to use and understand AE to access the content and demonstrate what they learned. I provided them with copies of the model lesson, a condensed version of the original lesson the TC submitted, with only the sections that would be necessary to complete the analysis: the content and language objectives, key vocabulary, lesson sequence, and review and assessment.

I asked the TCs to take a brief look through the model lesson first so that they would have an idea of what it is about and what the students are doing in the lesson. Once they had a chance to do this, I explained the first step, which is to examine the lesson for all instances in which students are expected to use or understand language in any of the four domains (listening, speaking, reading, and writing). I thought aloud as I scanned the lesson. I told them when I found an activity that required students to use or understand

language. I verbalized my thought process as I decided in which domain each use of language fit. I also explained that sometimes an activity requires language use or comprehension in more than one domain. In the model lesson, the teacher presented information on Power Point slides while she talked about them, which required that students listen to her speak, read what is on the slide, and write down notes from the slide; this activity could be included under three domains.

As I identified language-based activities, I wrote them in the section of the chart that corresponded to the correct domain(s). When I had done this with several activities, I asked TCs to volunteer any other instances they found and tell me where I should place them on the chart. Once we had found all of the instances of student language use or comprehension, I pointed out how many we were able to identify. I informed the TCs that content area lessons require so much language use and understanding that we never even consider and that doing this kind of analysis would help us to be aware of the central role that AE plays in learning in every content area.

Then the TCs analyzed the lesson plan that they brought with them for all instances in which students use language in all four domains (listening, speaking, reading, and writing). Then they wrote those activities in the appropriate box/boxes in the chart on their copy of the lesson planning worksheet. I checked in with each TC as he /she completed this step to make sure he/she understood or to answer any questions he/she had.

The next step involved determining the important uses of language in the lesson. I went back to the chart where I filled in all of the instances of language in the lesson, and I asked the TCs if I needed to write a language objective for each one of these. I told them

that not every use of language in a lesson is equally important in terms of accessing the content or demonstrating content knowledge. For example, in the model lesson, one of the instances in which students use or understand language is when one student reads the content and language objectives aloud. Is that an important use of language in this lesson? The criteria I presented for deciding if an activity is important were that every student needs to engage in using the language, that it needs to be directly related to and support the content objectives, and that it needs to be measurable or assessable. By these criteria, reading the objectives would not be important because, although it might be assessable, only one student engages in it and it is not directly related to learning or expressing knowledge about the content of the lesson. Then I found an instance that did meet all the criteria. In the model lesson, all students listed three similarities and three differences between the experiment they conducted in class and Rutherford's gold foil experiment. Since the content objectives were related to learning about Rutherford' gold foil experiment, all students are expected to do this writing, and the teacher could collect the work and assess it, this instance of language use would be an important one that I could identify. Additionally, the students work in small groups to write a summary of Rutherford's gold foil experiment and a comparison of the experiment they conducted and Rutherford's gold foil experiment. This would also be an instance that meets all the criteria. I identified these two as my important uses of language. I explained that we identified two instances because these instances will guide our creation of language objectives, and two is a manageable number of language objectives for one lesson.

Then TCs went back to their worksheets, on which they have identified all the instances of student language use, and tried to find two instances that met the criteria I

explained. They wrote these in the next section of the worksheet. If there was time, I asked them to write an explanation of why each instance was important.

Then I modeled naming the language function and features that corresponded with the important uses of language they identified. These need to be named so that they can be incorporated into language objectives for the lesson plan later in the training. I defined what a language function is, the purpose or goal of using the language, then I presented a list of common functions of AE, the same list which was on the pre-test. Then I referred back to the important use of language I identified in the model lesson, students writing three similarities and three differences. Listing similarities and differences is also known as comparing, so the language function for that instance would be compare. The other use of language I found said that students need to compare and summarize, both of which are language functions. Then I needed to identify the language features that must be used to accomplish the function. To illustrate what this meant, I asked TCs to think of one sentence in which they are comparing an apple and an orange. I then asked volunteers to tell us their sentences. I wrote them down and we talked about the features that reflected the function of comparing. Usually one TC used the comparative form of an adjective (rounder, sweeter, etc.), another used a conjunction in a compound sentence (Apples are red, but oranges are orange), another used words or phrases like both...and (Both apples and oranges are fruit.). Then I categorized the features we used as word or sentence level features. I would also explain that one discourse level feature we needed to consider is that the lesson specifies six sentences (three similarities and three differences), which is an amount of language. We might think of other structural or organization features at the paragraph or greater level. I explained that we are just

brainstorming possible features; some activities might require certain features or, if that were not the case, they could brainstorm as we did and then decide on the features they would expect from students. I always recommended to TCs that the easiest way to determine the features is to write out the "correct" answer and analyze what they wrote to determine what words and structures they used. What language do they want to hear students say or see them write? What word, sentence, or discourse level features are in that response?

The TCs then had a chance to name the language function of the important uses of language they identified in their lessons. After they identified the function, they brainstormed the features that reflected that function and considered which ones they might require students to use. They filled all of this information in on their lesson planning worksheet.

Write Language Objectives Based on the Features of AE They Identified

The next goal was to write language objectives that included the language function and features identified in the lesson plan. I showed the students a template for writing language objectives: *Students will be able to (language function) (connection to content) (mode) (grouping) using (language features that reflect function).* I modeled how to write language objectives for one of the most important uses of language I identified in the sample lesson. My objective read: *Students will be able to compare their experiment to Rutherford's gold foil experiment by writing a paragraph in small groups using the words similar, different, conversely, instead, and however.* Then I looked at the objective I created in relation to the ones that were included in the model lesson plan. The first objective is nearly identical, except that the TC combined the individual writing of

similarities and differences with the group paragraph writing, which seems fine as long as both will be collected and assessed. The model lesson also had a second language objective for the summary paragraph written in groups. I then deconstructed that objective in order to determine if it contained all of the elements of a language objective, which it did. At this point, I stressed the importance of including not only specialized academic vocabulary in the objective but also language at the word, sentence, and discourse level that reflected the language function. In the first objective, for instance, the words are related to comparison, not necessarily to chemistry. I asked them to be sure to include some features other than specialized vocabulary.

Then the TCs wrote language objectives based on the two most important uses of language they identified in the lesson they brought. I checked in with each TC to make sure that they included features beyond specialized vocabulary in at least one of the language objectives they wrote. I also reminded them of all of the elements that must be incorporated: language function, connection to content, mode, grouping, and language features.

Decide Where in the Lesson to Teach the Language

The last section of the training was dedicated to designating a place in the lesson plan for teaching or modeling of these language features. In the model lesson, I pointed out to them, the teacher planned to post the words that students needed to use and review their correct use with students. I told them that I thought she could even do more, such as model appropriate sentences using these words in order to help students see what they need to do. That modeling would be a more explicit way of directing students' attention both to the language features they need to use and how they need to use them. Any

language features they included in the language objectives must be taught to or modeled for students at some point in the lesson. I asked them to designate a place in the lesson plan where they would teach or model the features of AE they included in their language objectives. They also needed to explain how they would teach or model the language features for students. After every TC completed the last step, I reminded them that students from diverse linguistic backgrounds need explicit instruction in AE to succeed in school, and it is the responsibility of every teacher to teach the AE of their discipline.

APPENDIX B

Pre-Test and Post-Test

Name:		Content	t Area:		
Gender:		Year:	Sophomore	Junior	Senior
I identify as: Wh	nite African-A	merican	Latino/a	Asian	Other
I know: First Lai	nguage				
	ot proficient Some Language	what proficier	nt Very profici	ent Native	speaker/ Native-like
I am: No	ot proficient Some	what proficie	nt Very profici	ent Native	speaker/ Native-like
If you attended so	chool in the US, we	ere you ever co	onsidered an Er	nglish Langua	age Learner? Y N
I am a: P1 I	P2 P3				
If you circled P2	or P3, please list th	e location(s)	of your previou	s pre-practic	um placement(s):
	What % o				1 ()
		-25 26-50			
P2·	What % o			re ELLs?	
·		-25 26-50		C LLLS.	
	0 10 11	20 20 30	50.		
I have taken/am t	aking EDUC6346	Teaching Bil	ingual Students	VES NO)
	es, please name sem				,
II ye	s, picase name sem	icstci/ycai ain	a course msnuc	101	
T 1 4	15 1 617	T			
_	d Examples of Ke	•			
<u>A language func</u>	etion is the purpose	or reason for	using language	. Some comm	non language
functions used in	school are:				
Summarize	Defend	List	Rete	11	Describe
Compare	Recommend	Label	Class	sify	Explain
Justify	Name	Predict	Repo	•	Interpret
					1

To figure out the language function, ask yourself: What is it that the teacher wants students to DO with language?

<u>Language features</u> are the forms of language that need to be used in order to accomplish the function. You can identify language features at three levels:

- Word vocabulary (words and phrases)
- Sentence sentence structures (simple, compound, complex) and other grammatical features (for example: verb tense, prepositional phrases, passive voice)
- Discourse the amount of language students need to use and the structure of language (e.g. a four-step procedure, a bulleted list, a paragraph with a topic sentences, three details, and a concluding sentence)

To figure out the language features, ask yourself: What language (words, phrases, grammatical features, structures) do students need to use to (language function)?

PRE-TEST: Read each scenario below. Identify what you think the language function is for the task students are being asked to complete. Then list the language features the teacher wants them to use in the appropriate column (word, sentence, or discourse). Refer back to the explanations and examples on the first page to complete this task.

1. In biology class, students learned the names of the organelles of plant cells and the jobs

-	ves them a diagram of a plant cell of write the name of the organelle	
Function:		
Features Students Must Use:		
Word-Level	Sentence-Level	Discourse-Level
and George from <i>Of Mi</i> write a paragraph about paragraph should have a paragraph should contain <i>George</i>	, and Lenny also _, but Lenny	hem to use that Venn diagram to between the two characters. The his similar and different. The
Features Students Must Use:		
Word-Level	Sentence-Level	Discourse-Level
equation. The model she	er students to write down the step e provided for students to follow then I divided both sides of the equ	was: First I added 5 to both
Function:	-	
Features Students Must Use:		
Word-Level	Sentence-Level	Discourse-Level

POST-TEST: Read each scenario below. Identify what you think the language function is for the task students are being asked to complete. Then list the language features the teacher wants them to use in the appropriate column (word, sentence, or discourse). Refer back to the explanations and examples on the first page to complete this task.

1. A biology teacher wants her students to write about how carbon is exchanged among the atmosphere, land, water, and living things in the carbon cycle. The complete sentences should use the passive voice in the form of *Carbon is transferred/is released/is stored/is used ...*. The words *photosynthesis*, *decompose*, *atmosphere*, and *fossil fuels* must appear in the sentences.

Functi	ion:		
Featur	res Students Must Use:		
	Word-Level	Sentence-Level	Discourse-Level
2.	in poetry. The teacher c	ts learned about several literary de reated a worksheet with excerpts to e excerpts and write next to each o	from poems they read. The
Functi	ion:	· · · · · · · · · · · · · · · · · · ·	
Featur	res Students Must Use:		
	Word-Level	Sentence-Level	Discourse-Level
3.	Luther King Jr. The tead sentence paragraph about should use connectors s	s have created a Venn diagram ab cher asks them to use that Venn di ut the differences between the two uch as <i>conversely</i> or <i>on the other</i> tone sentence that uses a semi-col	iagram to write an eight- o men. In the paragraph, students hand to show the differences.
Functi			
Featur	res Students Must Use: Word-Level	Sentence-Level	Discourse-Level
	vv Oi u-Lic vei	SCHICACE-LEVEI	Discourse-Level

APPENDIX C

Lesson Planning Worksheet

Worksheet – Identifying and Teaching the Language of Your Lesson

What are students doing during this lesson in terms of language?

Listening	Speaking
Reading	Writing

What are the two most important uses of language for students in this lesson? Why?

1.

2.

	Sentence-Level	Discourse-Level
2.		
Eunction:		
Features of that Function I Co	uld Teach:	
Word-Level	Sentence-Level	Discourse-Level
Woru-Lever	Sentence-Level	Discourse-Level
Language Objectives		

Language Functions and Features

1.

Appendix D

Sample Artifacts with Completed Sections from Scoring Guide and Recording Sheet

Post-Test

1. A biology teacher wants her students to write about how carbon is exchanged among the atmosphere, land, water, and living things in the carbon cycle. The six complete sentences should use the passive voice in the form of *Carbon is transferred/is released/is stored/is used* The words *photosynthesis*, *decompose*, *atmosphere*, and *fossil fuels* must appear in the sentences.

Features Students Must Use:

Word-Level	Sentence-Level	Discourse-Level	
The words photosynthesis,	Six complete sentences in order	Students must describe the cycle	
decompose, atmosphere, and	to describe the Carbon Cycle in	using the passive voice.	
fossil fuel	the passive voice	34000 32	

2. In English class, students learned about several literary devices that are commonly used in poetry. The teacher created a worksheet with excerpts from poems they read. The students must write next to each excerpt the name of the literary device it contains.

Features Students Must Use:

Word-Level	Sentence-Level	Discourse-Level
	Reading skills to understand the poetry they are reading	Past experience in order to inform them on what appropriate device is being used

3. In history class, students have created a Venn diagram about Malcom X and Martin Luther King Jr. The teacher asks them to use that Venn diagram to write an eight-sentence paragraph about the differences between the two men. In the paragraph, students should use the connectors *conversely* or *on the other hand* to show the differences. They must write at least one sentence that uses a semi-colon followed by *however*.

Features Students Must Use:

Word-Level	Sentence-Level	Discourse-Level	
words like "conversely" or "on	the grammatical structure of a	information from their Venn	
the other hand" to make	compound sentence using a semi-	Diagram to understand the	
comparisons	colon with the word "however"	differences between the two men.	

Scoring Guide

	Not identified	Identified, incorrect level	Identified at correct level	Comment
	0	1	2	
6 Sentences		X		sentence level
Frame w/Passive Voice		X		discourse level
Science Vocabulary			X	
Literary Devices			X	
8 Sentence Paragraph	X			
Connectors			X	
Semi-Colon +however			X	

SCORE: 12/14

Other Identifications:

Sentence level:

Reading skills to understand the poetry they are reading

Discourse level:

- Past experience in order to inform them on what appropriate device is being used
- information from their Venn Diagram to understand the differences between the two men.

Lesson Planning Worksheet

Task: Video Response Questions

Features I Could Teach:

Word-Level	Sentence-Level	Discourse-Level
Utilizing key vocabulary that is	Requiring students to write in	Comparing and contrasting
appropriate to the topic	complete sentences.	abstract ideas
Choosing correct Spanish	Telling students to use the form	Asking students to think
vocabulary	"similar or different" in order to	critically about the video they
	compare and contrast	just watched

Lesson Plan

Language objective: Students will be able to compare and contrast the holidays of el Dia de los Muertos and Halloween in complete sentence using words such as similar, different, and because.

Recording Sheet

	Not	Specific ID	Specific ID	
WORKSHEET	specific /	at incorrect	at correct	Comment
	Unrelated	level	level	
Word				
Key vocabulary	2			
Spanish vocabulary				
Sentence				Cincil and difference
Complete sentences		1	1	Similar/different - word level
Similar or different				word level
Discourse				
Comparing and contrasting	2			
Think critically				
Total	4	1	1	

LESSON PLAN	Not specific / Unrelated	Specific ID	Comment
Word similar, different, because		1	No description of how to teach in lesson plan
Sentence complete sentences		1	No description of how to teach in lesson plan
Discourse			
Total		2	

APPENDIX E

Interview Protocol

Introduction

I am very interested to learn how you identify the academic language present in your lessons and how you talk about academic language with students when you are teaching a lesson. This study does not aim to evaluate your techniques or experiences. Rather, I am trying to learn more about how you plan lessons and the steps you take when considering academic language teaching, so that I can better understand how preservice teachers make use of the education they receive on academic language here at Lynch.

A. Lesson Plan and Planning Worksheet

1. Think Aloud

Let's take a look at this lesson plan you submitted. Describe your method for identifying the academic language present in this lesson. Take me through the process step-by-step.

- TCs will be encouraged to refer to the lesson plan and lesson planning worksheet if they get stuck or are unsure what to say.
- To minimize interruptions or distortions of cognitive process, prompts will only be used to seek clarification or explanation.
 - o Can you explain what you mean by ...?
 - o Can you tell me more about ...?

After completion of think aloud:

- 1. Did you have any help planning this lesson from your supervisor or cooperating teacher? How did you incorporate his/her advice/knowledge about academic language?
- 2. Did you use any other resources to help you plan this lesson? What help/advice/knowledge did that source provide in terms of academic language teaching?

B. The Lesson Plan Recording

Introduction: Let's talk about the rec	ording of the lesson you taught.
1. Clarification/explanation of what i	took place:
In the lesson you	. Can you tell me more about/explain
?	
2. If there are discrepancies between (in terms of language). Now the lesson plan says	lesson plan and enactment of lesson in recording but in the lesson itself you

- a. Can you tell me about the change you made?
- b. Why did you decide to change it?
- c. How was the change beneficial to the teaching of the lesson?
- 3. Do you think this lesson was successful in teaching academic language? Why or why not?
- 4. What revisions might you make to the lesson if you were to teach it again?

C. Reflection

- 1. What are the reasons for including an explicit focus on academic language in content area lessons?
- 2. What are your thoughts on the method you learned for identifying and teaching academic language?
 - a. What about it was helpful/useful?
 - b. What about it could be changed to be more helpful/useful?
 - c. Do you see yourself using this method to plan lessons in the future? Why/why not?
- 3. (P2/P3 only) In what way has your ability/capacity to identify academic language in your lessons changed over the course of your pre-practicum experiences? What do you think contributed to the change?
- 4. What more could the teacher education program do to help you plan lessons that incorporate an explicit focus on academic language teaching?