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Language, Literacy And Project Based Learning: An Ethnographic Case Study Of A New Tech Classroom In A High School On The US/Mexico Border

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LANGUAGE, LITERACY AND PROJECT BASED LEARNING:
AN ETHNOGRAPHIC CASE STUDY OF A NEW TECH
CLASSROOM IN A HIGH SCHOOL
ON THE US/MEXICO BORDER

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Dean of the Graduate School

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Dedication

To my family

LANGUAGE, LITERACY AND PROJECT BASED LEARNING:
AN ETHNOGRAPHIC CASE STUDY OF A NEW TECH
CLASSROOM IN A HIGH SCHOOL
ON THE US/MEXICO BORDER

by

NORA LEE PAUGH, B.S.Ed., M.Ed.

DISSERTATION

Presented to the Faculty of the Graduate School of
The University of Texas at El Paso
in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

Department of Teacher Education
THE UNIVERSITY OF TEXAS AT EL PASO

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Abstract

This ethnographic case study sought to understand how English Language Learners used their language and literacy practices within a project based learning (PBL) classroom to complete their PBL tasks. Studies revealed the impact of how English language learners within a PBL learning environment were able to use their language and literacy as a social practices that led to successful student engagement (Call & Sotillo, 1995; Campbell, 2012). This study was conducted at Wilson High School, located along the US/Mexico border. The focus of the case study was a 9th grade combination English/World Geography class of the school's inaugural New Tech Program. Using a purposive sampling, four focal English Language Learners within the case were selected and followed throughout the study.

This study was grounded in the sociocultural theories relevant to language and literacy practices. Most significantly, this study focused on the code-switching and translanguaging practices that ELLs used to make meaning and communicate with others. In Zentella's seminal study, *Growing up Bilingual* (1997), she identified three linguistic exchanges *in the head*, *out of mouth* and *on the spot* that pertained to intentional code-switching as a social practice aligned to identity. These linguistic exchanges were applied to the languaging practices of the focal students and analyzed using Discourse Analysis to understand how the students negotiated meaning and understanding.

Various ethnographic tools were used to conduct the study that revealed three significant findings. The students used their translanguaging practices to communicate informally and formally within the academic classroom. Secondly, the students engaged in higher order thinking to solve their project tasks. Finally, various literacy events functioned as pivots that triggered a show of solidarity and status as reflected in the students' languaging practices. The implications

of this study revealed a need for further research to compare/contrast code-switching and translanguaging within the classroom environment.

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Chapter 1: Introduction

In the 2016-2017 school year, the Texas Education Agency reported 1,005,765 Bilingual or English as a Second Language Learners enrolled in public schools in the state of Texas (Texas Education Agency, 2017). Similar enrollment trends were evident on a national level as schools saw a significant increase in English Learners and recent immigrants over the age of 15 entering US school (García & Wei, 2013). Schools were directed to identify the instructional needs of the new immigrant enrollees and place them accordingly in the appropriate classroom setting. The challenge remained on how to best serve the languaging needs of these students to help them develop second language acquisition while gaining relevant content knowledge. With an interest in understanding how the learning environment contributed to the development of language and literacy, in this study I examined how ELLs used their languaging interactions within one particular kind of learning environment, that of Project Based Learning, to shape their academic language and literacy practices.

The Bilingual Education Act of 1968 led to the implementation of bilingual education programs designed to meet the needs of ELLs (Gee, 2012). This legislation was designed to provide services for immigrant students enrolling in US schools. But during the 1960s and 1970s, most of the programs developed to help ELLs were subtractive in nature and minimized the students' use of their home language in an effort to promote the learning of English (Collins & Cioè-Peña, 2016; Edwards, 2006; García & Wei, 2013). The practice of subtractive bilingualism favored one language over another, primarily replacing the home language with the dominant language (Baker, 1996; Edwards, 2006; García & Wei, 2013). But the practice of replacing a student's home language with the dominant language sent the message that the

language of the ELL was unacceptable or inappropriate in the same way that it implied that the ELL was unacceptable or inappropriate (González, 2006). Many educators did not yet understand how first (L1) and second (L2) languages were connected (Edwards, 2006; Martínez, 2010), and ELLs were often placed in English-only learning environments with the goal of gaining English language proficiency while suppressing their first language (Alamillo, Palmer, Viramontes, & Garcia, 2005; Baker, 1996; Edwards, 2006; Olsen, 2014; Valenzuela, 2005). The concept of languaging, i.e. using language as a social communicative practice, was more than the use of syntactical words and phrases. Gee (2012) emphasized that people were a reflection of their up-bringing, their environment, their ideologies and their languaging. So, from this perspective, the connection between language and identity could not be negated as languaging was a social practice of communication be it formal or informal. The practice of subtractive bilingualism was damaging not only in the short term, but it had long term negative effects as students were often denied the opportunity to engage in academically rigorous instructional settings which could negatively impact academic outcomes (Esquinca, 2012; Olsen, 2014).

Research conducted by Cummins (1979) showed that the subtractive learning environment did not promote the proficient use of English. Studies showed that students who were denied the use and development of their native language struggled in gaining proficiency in a second language (Cummins, 1979; Cummins, Baker, & Hornberger, 2001). Research indicated that the brain of an ELL did not store languages in separate areas, indicating that the act of languaging, to include speaking, writing or communicating, was done by drawing on all available linguistic resources within the ELL in order for them to make meaning or communicate with others (Cummins, 1979; Garcia, 2009). Researchers (Cummins, 1979; García & Wei, 2013;

Zentella, 1997) noted that students used their entire language repertoire to communicate with their own versions of linguistic exchanges to include code-switching and translanguaging. Hornberger (1989) posited that rather than distinguish between different language practices, she stated that all languages, including translanguaging should be seen to be on a biliteracy continua. The continua demonstrated that languages were interconnected and supported the research that students drew from their many forms of languaging within their own biliteracy continua to make meaning. Translanguaging was identified as a new integrated language practice used by the speaker to engage in specific forms of communication (Baker, 2011; Lewis, Jones, & Baker, 2012), demonstrating that students used various linguistic exchanges to communicate with other. Translanguaging was more than a mixture of two languages, as it was an amalgamation of the speaker's entire language repertoire.

Cummins (1979) stated that an important component to second language acquisition was not so much the practice of using one language over the other, but more so to engage the ELL in meaningful cognitive development of languaging practices that will lead to the development of academic language. Dewey (1938) recognized that for any type of learning to be meaningful, it had to be relevant and purposeful. The Project Method was based on the idea that students could extend what they learned in the classroom and apply it to solve a real-world problem (Hugg & Wurdinger, 2007; Kilpatrick, 1918). Teaching the students, regardless of their languaging ability, how to solve applicable problems within society would promote purpose and value in their lives. This concept of Project Based Learning (PBL) was embraced by several researchers (Boss, Larmer & Mergendoller, 2013; Krajcik & Blumenfeld, 2006; Larmer, Mergendoller & Boss, 2015; Thomas, 2000) to create authentic and meaningful learning experiences as expressed by Cummins (1979). While some researchers acknowledged the detrimental effects of

subtractive bilingualism and called for academically rigorous and meaningful instructional settings for ELLs (Cummins, 1979; Olsen, 2014), educators had to find more effective ways to provide academic support for ELLs. Krajcik and Blumenfeld (2006) stated that one of the main components of implementing an effective PBL instructional unit was to have the students work collaboratively to solve their research problem. If learning conditions were optimal, bilingualism would be “multi-directional and recursive” (Garcia, 2009, p. 69), meaning that if PBL groups included both native and non-native speakers, the languaging practices of all the students would be strengthened. The collaborative learning environment within the PBL instructional setting could help provide a translanguaging space for ELLs to foster academic meaning-making and purposeful communication.

Purpose of the Study

This study seeks to contribute to the existing body of literature on the languaging practices of ELLs within a PBL instructional setting by using theories of discourse and figured worlds to examine how such a setting contributed to their use and development of academic language and literacy practices. This study will specifically address how ELLs used translanguaging within the instructional setting to complete collaborative PBL tasks. Additionally, this study will focus on how the developing identities of the ELLs, within their cultural world or figured world of their PBL classroom, were reflected in their language and literacy practices. This study was conducted at Wilson High School, a comprehensive 9 – 12 high school, along the US/Mexico border. The high school was part of a district that was associated with a cheating scandal that started as far back as 2006 and that resulted in the prosecution of several district administrators including the district superintendent. At the time of

this study, litigation was still pending for several high level administrators accused of fraud to manipulate test scores to gain a better accountability standing. In an effort to improve the district's overall academic performance, Wilson High School was authorized to implement the New Tech (NT) program with an inaugural cohort of 80 freshmen beginning with 2016-2017 class. This study was conducted during the second semester of the inaugural year of the New Tech program at Wilson High School. In order to initiate comprehensive restructuring for what was once a struggling campus, the district aligned the PBL focus of the New Tech program with strengths that the school had previously demonstrated in the arts and humanities. The NT network provided schools with services and support to implement a more creative approach to learning to include interdisciplinary project based learning rather than the traditional teacher-led instructional format (The New Tech Network, 2017). This ethnographic case study focused on one combination English/World Geography New Tech class where four ELLs were selected as focal students of the study.

This study sought to understand how students used their language and literacy practices within their NT classroom to complete their PBL tasks. The instructional format of PBL was designed to promote student learning within a socially mediated setting, along with understanding how the students used their language and literacy practices to express comprehension and communicate with others was significant to understanding their learning process. Pertinent to this study was to understand how a rigorous learning environment, much like that intended with the structure of a New Tech PBL classroom, contributed to the developing student identity of ELLs as they gained academic and cultural status that was demonstrated within their language and literacy practices. By combining all the components of the NT classroom, to include opportunities for student collaboration, implementation of real-world

instructional tasks and a socially mediated learning environment, a rich learning environment would be created allowing space for authentic translanguaging interaction among the students.

Within this context, this study will address the following research questions:

Overarching question: How do oral and written interactions in a New Tech classroom shape the academic language and literacy development of ELLs?

Sub-questions

- What are the oral and written language and literacy practices that New Tech students use to complete their PBL tasks?
- In the context of the figured world, how do ELLs demonstrate solidarity and status in their language and literacy practices?

Theoretical Framework

Code-Switching and Translanguaging.

This study was grounded in the sociocultural theories relevant to language and literacy practices. Most significantly, this study focused on the code-switching and translanguaging practices that ELLs used to make meaning and communicate with others. Using Zentella's research in the seminal study, *Growing up Bilingual* (1997), she identified three linguistic exchanges that pertained to intentional code-switching as a social practice aligned to identity. Linguistic exchanges such as On the Spot, In the Head and Out of Mouth not only reflected the identity of the speakers in Zentella's (1997) study, but they were examples of purposeful code-switches that the focal students in the study used in their communication with one another. By using the body of research from the New Literacy Studies (NLS) to understand how language practices were used as social forms of communication, I was able to apply the linguistic exchanges identified by Zentella to the languaging practices of the participants in my study in

order to gain a better understanding of their motive and intent of their languaging as a social practice. Zentella indicated that the linguistic exchanges used by the children in her study reflected purposeful shifts or what she referred to as footings (Zentella, 1997). When the students in Zentella's study code-switched, they switched specific words or phrases to show emphasis in meaning. These intentional shifts in footing were supported by the research from NLS as those shifts in literacy, such as used by the children in Zentella's study (1997), were more just than grammatical structures. The way the children code-switched demonstrated how they were able to use their languaging practices as a form of social communication intended to convey a very specific meaning.

Discourse, status and solidarity.

Gee (2012) stated that Discourse (capital D) was more than just the use of language. Discourse included ways of speaking, listening and interacting on a social level to create an intricate connection between languaging activities and identity. As the Discourses of the focal students of this study were analyzed, the concepts of solidarity and status were reflected in their languaging practices (Gee, 2012). The concepts of status and solidarity, according to Gee (2012), were concepts that were both related and often competing depending on the social intent of the speaker. A speaker could demonstrate a show of status or power that would elevate their position within their circle of friends, and at the same time they could use intentional word choices that would show solidarity to align their membership with those same friends. When strangers entered the neighborhood in Zentella's study referred to as *El Bloque*, they often spoke in English to people they did not know. But as the children befriended these people, they eventually started to speak to them in Spanish as a show of acceptance and solidarity as neighbors within *El Bloque* (Zentella, 1997). By identifying when and how the focal students in

my study demonstrated status or solidarity within their oral or written language practices allowed me to better understand the specific intent of their languaging practices and provided insight into their identity or changing identity as a learner within their PBL program.

Figured worlds.

As student identity became a significant component to how the focal students used their languaging practices within their NT classroom, I applied the theory of Figured Worlds (Holland, Lachicotte, Skinner, & Cain, 1998) to examine how the social environment within their classroom was connected to their language practices. Most of the students in the Wilson New Tech (WNT) program were randomly placed in the program from the general student population. Campus administrators were directed to build the inaugural cohort of WNT to house at least 80 students, but after only a handful of students applied to the program, the school decided to randomly place students from the general school population into the program. Most of the students did not know they were part of WNT until the first day of school. The schedules of the WNT students reflected that all their classes were taught by WNT teachers and their classrooms were confined within the same instructional wing. The teachers developed common norms that they felt would strengthen the WNT student body such as teaching the students to use their WNT webpage to access the daily agenda or to recognize links such as *What I Gotta Know* as websites that would provide them with necessary background information needed to start a project. The students quickly started to demonstrate these shared practices which identified them as members of the WNT figured world. Holland et al. (1998) defined figured worlds as cultural “realm[s] of interpretation in which a particular set of characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (p. 52). Members of a figured world come to personify the figured world to which they belonged. The

students of WNT, who were essentially no different from the students in the general population, started to display shared repertoires that aligned them with membership into the figured world of WNT. When asked to reflect on recent state testing, the students mentioned to me that it was easy to differentiate the students from WNT from the students who were not in WNT. The participants in my study noted that during the last test administration, the WNT students took advantage of allowable resources such as highlighters and dictionaries to complete the test. But they noticed that students who were not part of WNT did not use those resources to complete their exam. As the students learned to recognize that they shared common practices as WNT students, they gained a newfound academic status or capital that identified them as “good students” (Bourdieu, 1989; Hatt, 2007). This identity shift was relevant as Wilson High School had been trying to distance itself from the district’s cheating scandal that engulfed the high schools and that seemed to continue to impact the collective identity of Wilson High School. Although the students of Wilson High School were not connected to the cheating scandal designed to inflate test scores, the students seemed to inherit a baseless negative identity that cast them as “cheaters” by association.

Relevant to their newfound identity as members of the WNT figured world was the research conducted by Vygotsky (1978) on how an artifact or tool, referred to as a “pivot,” could function as a trigger leading to an identity shift. I further explored the connection between the identity of the ELLs as *transfronterizos* or border crossers as students enrolled in a district synonymous with cheating, to how certain literacy events functioned as pivots that triggered an identity shift in each of the focal students changing their language and literacy practices. As the students seemed to internalize that they were different from the students in the general population, they started to embrace the fact that they shared common practices that elevated their

status on campus. The language and literacy practices of the students reflected newly acquired academic language and vocabulary as a result of fortuitous pivots that contributed to identity shifts that altered the learning trajectory of the four focal students as evidenced in their social communication practices.

Significance of the Study

Studies have shown that engaging students in PBL may foster the development of higher order thinking and relevant student collaboration where the students focus on their languaging strengths rather than weaknesses (Edelson & Reiser, 2006; Hammar Chiriac, 2008; Krajcik & Blumenfeld, 2006). By not including ELLs within a rich learning environment such as PBL, the achievement gap between the dominant students and ELLs may very likely widen as dominant students continue to thrive while ELLs continue to fail (Olsen, 2014; Ruiz, 2005). Studies conducted by Campbell (2012) and Call and Sotillo (1995) demonstrated the impact of how ELLs within a PBL learning environment were able to use their language and literacy as a social practices that led to successful student engagement.

Although several studies were cited in the literature review regarding collaborative student learning, I found limited empirical studies focusing on how the implementation of PBL was connected to the language and literacy practices of ELLs. There was a significant amount of literature on the implementation of PBL at the elementary and middle school levels, but studies were limited on the implementation of PBL with English Language Learners at the high school level.

This study will attempt to provide empirical evidence to the body of literature on PBL to show how a PBL instructional approach can shape the use of academic language and literacy practices of high school ELLs (García & Wei, 2013). Additionally, this study hopes to add new

knowledge on how a PBL learning environment in a comprehensive high school provides space for translanguaging as a social practice to support the meaning making and academic connections made by ELLs during the learning process. PBL learning tasks can be applied to real world applications (Dewey, 1938) at the secondary level leading to authentic learning tasks as a departure from subtractive bilingual practices that have often been used with ELLs (Edwards, 2006; García & Wei, 2013).

This study seeks to contribute to the body of research as well as to the current practices regarding the implementation of PBL with ELLs in three ways. First of all, in addressing the first research sub-question, this study hopes to illustrate how the PBL learning environment is connected to the academic language and literacy development of ELLs in a public school setting. School administrators and teachers can use this study to better understand how instructional approaches to learning are connected to higher order thinking via PBL formats. Secondly, because the needs of high school students are different from those at the elementary and middle school level, this study seeks to explore how the implementation of PBL relates to the learning trajectory of a high school student, particularly a high school ELL. Finally, addressing the second research sub-question can provide teachers and administrators with empirical evidence showing how the PBL classroom environment is connected to the developing identities of ELLs. Student identity enactments and languaging practices are closely interrelated (Gee, 2012); therefore, student identity shifts can be evident through language and literacy practices of ELLs within a PBL instructional setting. Furthermore, teachers and administrators can benefit from the empirical data presented in this study that reflects an additive approach to learning showing how ELLs develop academic language and literacy as a social communicative practice.

Organization of the Study

The goal of this study is to understand how PBL is connected to the language and literacy development of ELLs. Below is a summary of the structure of this study.

Chapter one provides an overview of the study which addresses how ELLs used code-switching exchanges within the instructional setting to complete collaborative PBL tasks. A focus of how developing identities are reflected within the language and literacy practices of the students within the figured world of WNT is also presented. An overview of the theoretical frameworks grounding this study are also presented in chapter one. I argue that because ELLs have often been subjected to subtractive bilingualism in the past, using PBL as an instructional approach to learning could provide them with the opportunity to engage in translanguaging as a means to academic make content connections. Chapter two presents the three theoretical frameworks grounding this study based on language and literacy as social practices. Focusing on the research by Zentella (1997), information is presented showing how the participants in her study used linguistic exchanges to communicate with others. Referencing the research on code-switching, translanguaging and discourse analysis, I argue that PBL instructional formats created as part of the WNT program provided conversational space that allowed students to use their available linguistic resources to make content connections and communicate with others (García & Wei, 2013; Gee, 2012; Zentella, 1997). Additionally, information is presented in chapter two on how the theory of figured worlds (Holland et al., 1998) connects languaging practices to the developing identities of the students of WNT. Finally, a review of relevant literature pertinent to PBL and collaborative learning is presented in the second half of chapter two. Chapter three provides an overview of the methodology used to conduct this study. An explanation is provided as to why an ethnographic case study was the best approach to understand how the instructional

setting within the PBL classroom helped shape the language and literacy practices of the students. Ethical consideration and information on positionality is presented in chapter three which also includes an overview of the research site and background information on the focal students of the study.

Analysis of collected research data is presented in chapters four and five. Chapter four begins with a chronology of the PBL units completed by the students and also addresses the first research sub-question in describing how the students use their oral and written languaging practices to complete their PBL tasks. To describe how the students used their oral language and literacy practices, I present an analysis of the student Discourses based on the linguistic exchanges identified by Zentella (1997). This chapter explains how the students used Out of Mouth, In the Head and On the Spot languaging interactions to align their spoken intent with their identity (Zentella, 1997). An overview is provided in chapter four of the various types of written language and literacy practices completed by the students. In addition to presenting various forms of accountability writing that the students completed for the TELPAS exam, focus is directed to the technical writing and creative authoring completed by the students as they engaged in their PBL instructional projects. Chapter five focuses on addressing the second research sub-question by illustrating how the students the language and literacy practices of the WNT demonstrated the concepts of status and solidarity as they came to personify membership in the figured world of WNT. Contextual information is provided on the historical background of Wilson High School, and I argue that because of the cheating scandal surrounding Borderland ISD, the students of WNT were unwillingly ascribed a negative identity based on the public perception that the students of the district's high schools were considered cheaters. I argue that literacy events that functioned as pivots triggered identity shifts in the four focal students as

reflected in their language and literacy practices. Chapter six presents the findings and implications of the study for teachers and administrators who can enact instructional changes within the learning environment for ELLs.

Chapter 2: Theoretical Framework and Review of the Literature

The theoretical perspectives that guided this study are based on how ELLs use oral and written interactions as social practices within their PBL learning environment. To better understand how the students' oral and written interactions are connected not only to their language and literacy practices but also to their developing identities within their figured worlds, I will focus on three theoretical frameworks. The first two theoretical frameworks address the over-arching research question along with the first sub-question focusing on how students use their oral and written language and literacy practices within their PBL classroom. The third theoretical framework addresses the second sub-question by demonstrating how the language and literacy practices of the students reflect the related and competing concepts of status and solidarity.

The first theoretical framework of this chapter is based on code-switching and translanguaging interactions of second language learners. I begin with a historical perspective on code-switching and translanguaging which are prevalent language practices common to second language learners. I introduce the concepts presented in the seminal study by Zentella, *Growing up Bilingual* (1997) that pertain to intentional code-switches focusing on linguistic and social identities of second language speakers. Relevant to the progression of code-switching, information is presented on the study of second language acquisition primarily for the ELLs as it pertains to their translanguaging practices. The information regarding code-switching and translanguaging is particularly relevant to this study as it focuses on how students use intentional language patterns to make meaning. The second theoretical lens is based on the concepts of language and literacy as social practices to include theories of discourse and academic language.

I examine Gee's theory of Discourse (capital D) and the New Literacy Studies in connection to how student's language and literacy are used as social practices to demonstrate the concepts of status and solidarity aligned to student identity. The correlation between language and identity is further investigated with information regarding the ELLs' use of conversational fluency and academic language. The final theoretical perspective focuses on student identity in connection to figured words. Information regarding English Language Learners as *transfronterizos* along with the concepts and ideas that contribute to their figured worlds is presented. I include research conducted by Vygotsky (1978) on how an artifact or tool can function as a trigger leading to an identity shift. I further explore the connection between a pivot and the identity of *transfronterizos* within their figured world.

The second half of this chapter presents a review of the literature pertinent to project based learning. A historical perspective of PBL is presented followed by information on various PBL approaches to learning. Finally, information is presented on the academically rigorous learning environment of a PBL classroom that promotes language and literacy as social practices for ELLs.

Code-switching and Translanguaging

The landmark study *Growing up Bilingual* focused on five Puerto Rican children growing up in a South Bronx New York Puerto Rican (NYPR) neighborhood referred to as *El Bloque* (Zentella, 1997) or the block. In that study, Zentella (1997) argued that a previous research on language and literacy often focused on actual linguistic practices of ELLs rather than on the context of their interactions. Researchers (McClure, 1977; Valdés, 1976) were very focused on the actual linguistic transitions made by ELLs as they shifted from one language to the next. But Zentella (1997) noted that what was most significant were not the actual shifts, but the meaning

behind the language shifts or code-switches. By focusing on the intent of the speaker, one could then better understand the connection between being bilingual and the connection to the speaker's identity. Zentella (1997) argued that the languaging shifts demonstrated by bilingual speakers were not arbitrary in nature. She felt that the switches indicated intent and meaning in their languaging context.

Code-switching.

Over the course of her study, Zentella (1997) focused on the languaging patterns of the children identifying when and how they used Standard or Non-Standard Puerto Rican Spanish, Puerto Rican English, African American Vernacular English, "Hispanized" English (Zentella, 1997, p. 47) or a combination of languages to make meaning as they communicated with others. More importantly than when and how they used their language and literacy was to understand why they used certain linguistic patterns. Zentella identified that the children switched words interchangeably between English and Spanish, but the exchanges were not random; instead, they were very intentional. While some researchers (Haugen, 1954; Weinreich, 1979) determined that linguistic interference such as using two languages interchangeably could prevent a student from learning the second language, Zentella noted that the switches or code-switches of the students were purposeful and carried meaning.

Although Haugen (1954) and Weinreich (1979) both argued that code-switching was a juxtaposition of switches between languages, Zentella (1997) noted in her study that the students code-switched because they could express themselves most effectively and clearly by integrating their languages. This view aligned to Zentella's (1997) definition of code-switching as a "conversational activity" (p. 113) that represented a unique form of bilingual communication that was used to negotiate meaning. Code-switching was perceived somewhat as a maligned

linguaging practice (Acosta-Belén, 1975; Edwards, 2006; Zentella, 1997) because ELLs did not demonstrate the standard form of one language and consequently were often stigmatized by both English and Spanish speakers. Additionally, because Spanish was the primary language of the children of *El Bloque*, and because they often code-switched between two languages, the children of *El Bloque* were stigmatized and suffered cultural stereotypes (Edwards, 2006; García & Wei, 2013). The negative insinuations about the “sloppy” (p. 151) merging of languages was already in practice as speakers throughout the US were already using their own versions of Spanglish or Tex Mex (Acosta-Belén, 1975). Zentella noted, however, that the code-switching of the children of *El Bloque* was not sloppy; instead, it had meaning and significance to the speaker and listener. The children often code-switched specific words or clauses to purposefully emphasize meaning. At other times the children code-switched phrases or sentences to indicate a shift in their role as a speaker or what was referred to as footing (Goffman, 1979). An example of a shift in footing can be when a speaker code-switches to alter their role from peer to protector for the purpose of “mothering” (Zentella, 1997, p. 72) or to code-switch a shift to demonstrate a show of power.

Linguistic exchanges.

As Zentella (1997) continued to analyze the language patterns of the children of *El Bloque*, she noted that they used three linguistic exchanges connected to their identity as a speaker: On the Spot, In the Head and Out of Mouth. The children of *El Bloque* used these linguistic exchanges within their NYPR community to communicate and establish meaning. (1) On the Spot communication was a mix of various factors leading up to the actual interaction of the speaker. Factors that affected how language was used included the setting of the conversation, the listeners or interlocutors involved in the conversation along with social and

cultural values of the setting. A combination of these factors determined “on the spot” how the students would use their code-switching to communicate. (2) In the Head communication was more deliberate as the speaker took into account how the listener would respond to their verbal interaction. Sometimes speakers would use specific words to gain “approval or attention” (Zentella, 1997, p. 93) from the listener and would then intentionally change their choice of words in the head to accommodate their linguistic intention. (3) Out of Mouth exchanges were more aligned to Garcia and Wei’s (2013) definition of translanguaging but were also referred to as Spanglish by Zentella. Out of mouth code-switching was characterized by a deliberate choice of words, phrases or “expressions to communicate meaning in one language or another” (Zentella, 1997, p. 83). The intent of out of mouth communication was deliberate as the students selected specific words and phrases to most effectively communicate using their code-switching practices.

Although Zentella (1997) analyzed the languaging interactions of the children of *El Bloque* from a linguistic perspective, these exchanges were applied to this study in a more thematic approach. Using *Growing Up Bilingual* (Zentella, 1997) as a theoretical framework, I analyzed how the participants of my study were thematically using the linguistic exchanges identified by Zentella (1997) to make meaning and negotiate understanding.

Translanguaging.

Researchers understood that languaging was dynamic and constantly evolving (Bakhtin, 2010), and studies around bilingualism and code-switching were starting to reflect theoretical shifts to recognize translanguaging as a new language practice (Collins & Cioè-Peña, 2016; García, 2011; García & Wei, 2013). Studies of L1 and L2 language acquisition found that the dichotomy between L1 and L2 was now blurred, as research indicated that languages were not

stored in separate parts of the brain (Cummins, 1979; García & Sylvan, 2011; García & Wei, 2013; Hornberger, 2005). Hornberger posited that rather than establish a binary between L1 and L2, all language practices, including translanguaging, were on a biliteracy continua (Hornberger, 1989). The continua functioned as a means to show the interrelated connection between all language practices. In 1997, Zentella noted that the focal students of her study were practicing intentional code-switches to demonstrate shifts in footing to make meaning and align their languaging to their identity. Her description of the intentional use of code-switching by her students foreshadowed the concept of translanguaging later articulated by Garcia & Wei (2013). When translanguaging was first identified as its own form of communication, it was still confounded with code-switching. But as code-switching was defined as going back and forth between two languages, translanguaging was considered a more complicated discursive process. The word translanguaging was first defined as “the process of making meaning, shaping experiences, gaining understanding and knowledge through the use of two languages” (Baker, 2011, p. 288). Translanguaging was not so much about a shift in footing as was code-switching, but translanguaging was a new integrated languaging practice with a specific communicative intent by the speaker (Baker, 2011; Lewis et al., 2012). Translanguaging was more than a mixture of two languages, as it was an amalgamation of the speaker’s entire language repertoire. Garcia posited that “bilinguals have *one linguistic repertoire* from which they select features *strategically* to communicate effectively (Garcia, 2012, p. 1, emphasis in original). This position was further supported by studies that showed that languages were not stored in separate parts of the brain (Cummins, 1979). The languaging practices of bilinguals were no longer identified by whether they were using L1 or L2 to communicate. The emphasis now was only on effective communication through translanguaging which was the selected language practice of

many bilingual speakers. The next section will present information on how the concepts of status and solidarity both compete and relate to identity through Gee's theory of discourse.

Discourse, Status and Solidarity

The information presented on code-switching and translanguaging focused not only on specific shifts in speaking patterns of bilinguals, but also on how bilingual speakers used their languaging practices to make meaning and communicate with others (Hornberger & Link, 2012). Code-switching and translanguaging were more than just about shifts in word choice; they were social practices of communication. The use of language and literacy as a social and cultural practice included code-switching and translanguaging (Perry, 2012). Using discourse analysis to study languaging patterns and conversational exchanges, researchers were able to identify not only how speakers used their languaging to communicate, but to also understand the role that languages played as a social practice among people, groups and communities (Gee, 2012; Perry, 2012).

Language as a Social Practice

Research from the body of work known as the New Literacy Studies (NLS) indicated that literacy and language were more than just the everyday use of grammatical structures because the role of language was to communicate and convey meaning (Gee, 2012, 2014). The use of language as a social practice was also a reflection of the identity and intent of its speakers. Through the discourse used by speakers, their intentions and enacting identities were reflected in how they expressed themselves through language. Gee (2012) stated that in order to fully understand and analyze a speaker's meaning or intent, researchers needed to study "extended

stretches of talk” (p. 112) or conversations to make sense of the meaning and significance of such Discourses. Zentella studied extended exchanges of conversations by the focal students in her study to understand the motive behind their code-switches, which were indicative of the social context in which they lived. The connection between language practices and social environment is significant because the sociocultural context of the speaker impacts what and how they use their language to communicate. Gee (2012) emphasized that social variables of a specific setting were always a part of languaging. What made sense to one community would not always make sense to another community because the social practice of languaging contained cultural cues relevant to specific persons, groups or communities.

Solidarity and Status

Through the analysis of various discourses, Gee (2012) discovered that status and solidarity were often reflected in social language practices. These concepts, often embedded in situated meaning, were important to the sense-making and intent expressed by speakers within specific social settings or communities. The concepts of status and solidarity, according to Gee (2012), were closely related and yet often conflicting at the same time within a social setting. A speaker could express situated meaning that reflected a shift in their status that set them apart from others within their social circle. At the same time, languaging exchanges could also reflect solidarity by the use of intentional selective word choice that would align one person with another within a specific social environment. Gee (2012) presented an example of how a social setting could impact languaging practices that reflected both status and solidarity by contrasting the use of the word *lookin* to *looking*. Although the connotation of the words reflect the same meaning, the two words expressed different social intentions. The pronunciation of the word *lookin* would be considered the more informal version of *looking* (Milroy & Milroy, 1985). A

speaker who was interested in establishing or maintaining a certain social status would likely use the word *looking* (Bourdieu, 1997), but if that same person was talking with a friend from the neighborhood, they would probably use the more informal *lookin* as a show of solidarity (Gee, 2012; Milroy, 1980). The language practice contrasted here reflecting the informal register with the word *lookin* versus the more formal register using the word *looking* may seem like two different language practices, but fundamentally, they are both examples of languaging on different spectrums. Just as the biliteracy continua represented various languaging practices (Hornberger, 1989), and modalities, researchers (Labov, 1972; Milroy & Gordon, 2008; Milroy, 1980) indicated that various language styles, to include formal and informal contexts or registers could also be arranged within form of a language style continua. The use of formal and informal registers that reflected status and solidarity provided insight into the speaker's intent and identity. The link between language and social environment was greatly connected to the composition of the social circle to which a speaker belonged as it reflected the register they would use to show solidarity or status.

Zentella (1997) identified the linguistic exchanges used by the focal students in her study, but she focused on the importance of their meaning making as they used their code-switches within their languaging practices. The research conducted by NLS reflected that language was a social practice used for communication. Through Gee's (2012) discourse analysis, the concepts of status and solidarity were identified in this study within situated meaning as both related and competing ideologies. Through the intentional and social use of language, a speaker could demonstrate a shift in status or align himself in solidarity with a friend. The concepts of status and solidarity reflected not only intent, but the speaker's identity within their social circle. The

next section will show the parallel connection between formal and informal registers and academic and conversation language practices.

Academic Language and Student Identity

Cummins identified the difference between conversational fluency or Basic Interpersonal Communication Skills (BICS) and academic proficiency or Cognitive Academic Language Proficiency (CALP) for second language learners, noting that although student language registers varied according to their environment (Cummins, 1999), ELLs could nonetheless use their available language repertoire to effectively communicate informally or formally (García & Wei, 2013; Thorne & Lantolf, 2006). A similar language distinction was made by Gee (2012) when he identified primary Discourse as the informal discourse of the home learned during early socialization and secondary Discourse as the more structured academic discourse developed outside the home in schools or other structured environments. Although students may confidently express themselves within informal settings by using their primary Discourse or conversational fluency, their identity as second language learners may inhibit them from engaging in more formal academic conversations within the structured classroom for fear of making some kind of mistake (Hong-Nam & Leavell, 2006). But an informal setting out in the playground, in the lunch room or within the confines of a linguistically supportive classroom can provide a second language learner a safe opportunity to practice and engage in informal or formal conversations that show solidarity with their peers without fear of public correction by a teacher. Although a student's CALP could identify student limitations, Cummins also stated that a student's informal spoken register could also demonstrate linguistic proficiencies aligned with achieving academic status (Bourdieu, 1997; Cummins, 2003; Gibbons, 2003; Hong-Nam & Leavell, 2006). Researchers (MacSwan & Rolstad, 2003; Scarcella, 2003; Valdés, 2004; Wiley,

1996), however, have challenged the BICS/CALP distinction emphasizing that the differentiation can erroneously lead educators to believe that students are more linguistically proficient than they are based on their use of informal register or mistakenly label their linguistic proficiency based on standardized testing alone (Cummins, 2003; Gibbons, 2003). A comprehensive linguistic profile of an ELL includes understanding how they use their informal register within their social settings as they are gaining academic language practices within the learning environment as well. Developing opportunities for students to merge informal registers with newly acquired academic language can lead to promoting shifts in student identity as students learn to use academic language more frequently in class and in informal settings.

A study conducted by Bartlett (2008) at Luperon High School, demonstrated the direct impact on learning when a school embraced an additive perspective to learning that valued student differences and funds of knowledge (Gonzalez, Moll, & Amanti, 2005) rather than focusing on perceived student deficits. Luperon High School was a large bilingual high school in New York City designed for newcomer immigrant youth where most of the students were from the Dominican Republic. The most distinguishing feature of Luperon High School was that rather than frame Spanish speaking as a negative trait of the learner, it was viewed as a valuable resource elevating the status of Spanish speakers (Luttrell & Parker, 2001). Teachers used Spanish to clarify concepts and ensure positive student engagement while students continued to gain second language acquisition (Bartlett, 2008). The study described how Maria, a student at Luperon High School, was compelled to transform her identity from the struggling student to the active learner that she knew she could be (Bartlett, 2008). Buehl (2011) explained that students bring a certain identity to the classroom that impacts not only how they learn, but how they perceive themselves as a learner. Maria's positionality at Luperon identified her as a student

with an interrupted education, and she felt and believed that she was not initially on par academically with her peers. Once Maria internalized that she had the capacity to be a good student, she was empowered to re-direct her learning toward a more positive trajectory (Moore & Onofrey, 2007). Taking advantage of the supportive Spanish speaking environment at Luperon, Maria used her bilingual language and literacy practices to help her gain oral and written fluency in English as she embodied the identity of the good student (Bartlett, 2008). At that point in her identity transformation, Maria created a social environment where she was surrounded with the students who had already achieved the status of good students and she sought out teachers who could contribute to her success allowing her to gain the cultural and social capital (Bourdieu, 1997) that propelled her toward a positive learning trajectory. Pertinent to the development of cultural and social status, Maria also strengthened her linguistic capital as a learner as her bilingual language and literacy practices were strengthened. Her surrounding social environment and her newfound language and literacy practices in English shifted her identity, where she believed and exuded the confidence that she was in fact a good student. Her identity reflected such a shift as she aligned herself in solidarity with the students she felt were high performing students and she embraced the status of being a good student (Hatt, 2007). The linguistic practices or habitus of ELLs like Maria contribute to not only how ELLs learn to decipher concepts and ideas, but those linguistic practices become powerful links to academic learning leading to the social, cultural and linguistic capital so valued by society (Bourdieu, 1997).

Preconceived notions and cultural stereotypes may limit ELLs from aligning themselves in solidarity to their English speaking peers because they may not have the same opportunities to engage in creative approaches to learning that their English speaking peers practiced on a regular basis (Bartlett, 2008; Edwards, 2006; Escamilla, 2006; Murillo, 2010). If the teachers of ELLs

harbored any deficit perspectives that ELLs were equated to low performing students, then their opportunity to engage in academic language practices would be limited and therefore prevent them from reaching the status of high performing students. As a result of the perception that ELLs may possess learning deficits simply because they do not speak the dominant language, their learning environment may be based on limitations rather than possible student potential thereby limiting the opportunity to ever reach the learning trajectory of the ZPD (Hung & Der-Thanq, 2001; Lantolf, 2000; Vygotsky, 1978; Walqui, 2007). The classroom learning environment can conflate conversational fluency and developing academic language through translanguaging as students work with their peers within an academic setting (García & Wei, 2013).

The next section presents information on how identity is connected to the concept of figured worlds. Although all the four focal students in my study had familial connections to Mexico, only the male focal students were considered *transfronterizos* as they crossed the border on a regular basis. The complex nature of the identity of ELLs is presented as it correlates to their uniqueness as *transfronterizos* and/or transnational students that contributes to the figured world to which they belong. A definition of *transfronterizos* is provided along with a historical perspective of that illustrates the multifaceted challenges faced by students and families who exist within two countries.

Figured Worlds

Because of the intricate connection between languaging and the social environment, the concept of the figured world is closely aligned to how languaging is used and most importantly how a speaker expresses intent. Language and literacy practices are more than just syntactical sentence structure, because the greater role of language is to function as a communicative social

practice. The language practices of a speaker are aligned to their identity and connected to the social environment in which they live, learn or work. As identities shift, so do languaging practices. ELLs who may be most comfortable in communicating informally with their peers can rely on the fact that the intent of their language practices will likely not be misunderstood by their friends because of the solidarity that has been established within the language practices of that community. But, shifting identities also shift languaging practices. The same student who engages in the informal register at home can learn to incorporate academic language practiced at school in a more formal social setting. Formal and informal languaging patterns are based on the social setting of the speaker. Those settings reflect environmental realms that influence the behavior and speaking patterns of an ELL.

Holland, Lachiocotte, Skinner and Cain (1998) defined figured worlds as cultural “realm[s] of interpretation in which a particular set of characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (p. 52). There are four components that characterize a figured world (Holland et al., 1998). First, actors or participants are recruited into the figured world. Once they have entered that world, their actions and behaviors contribute to the identity of that figured world. Secondly, social position matters within a figured world. A person can enter a figured world based on their social position or they may be excluded from a figured world based on their social position. Thirdly, figured worlds are “socially organized and reproduced” (Holland et al., 1998, p. 41) where the participants have various roles as they interact with one another. Finally, figured worlds personify the various cultural entities that they create (Holland et al., 1998). Each figured world has its own unique and identifiable personality contributing to the cultural whole. A figured

world is created based on the activities, procedures, discourses or artifacts shared among its members (Holland et al., 1998).

In Zentella's study (1997), the commonality shared by the focal students was that they all lived within the *El Bloque* neighborhood. The fact that they lived within close proximity of each other meant that they shared common practices and ideologies typical of *El Bloque* community members. When new families moved into the neighborhood, the surrounding families observed the actions of the new people and determined whether they would be accepted or recruited into their neighborhood circle. If a person of an elite social status moved into the neighborhood, because of the differences in social status, the neighbor of *El Bloque* might have been leery of accepting them into the figured world of *El Bloque*. The social practices established within the community of *El Bloque* were patterned after behaviors that were considered acceptable and routine within their community. It was not unusual for a child to speak to a stranger in English or for them to speak to a member of *El Bloque* in Spanish. A stranger was an outsider to the figured world of *El Bloque* so the social language was generally English. But when the children spoke to people living in *El Bloque*, they usually spoke to them in Spanish because they shared the solidarity of living within the same neighborhood, the same figured world (Zentella, 1997). Every community demonstrates its own unique personality as its own figured world. Within a figured world, members share practices that include languaging that identify their membership to a specific figured world. The identifiable practices can be positive attributes such as the shared practices of members of the high school band or they can be perceived as negative attributes such as the shared actions of school bullies. The next section provides information on the figured world of ELLs as *transfronterizos* or transnational students enrolled in US school.

The English Language Learner

English Language Learners enrolled in US schools also share common practices within their own figured worlds. Since they are not part of the mainstream population and because they share the fact that they are ELLs, they have a specific figured world to which they belong. At school, the ELLs belong to figured worlds that either supports their language diversity or suppresses their language diversity. They may be the students who all share the fact that they are isolated from the mainstream instruction due to subtractive language practices, or they may share the same teachers who are trained to support their linguistic diversity. When ELLs go home from school, they might also belong to another figured world in another capacity. A person can identify with more than one figured world such as a being a student at school during the day and being an employee at the market after school. Every figured world shares common practices and languaging patterns, and the literacy practices of a person belonging to two different figured worlds will change depending on the expectation of that figured world. The shared characteristics demonstrated by ELLs within their figured world reflect their languaging practices, the intent of their languaging practices and the social environment in which they live.

The figured world of an ELL may include feelings of insecurity because of their social status as non-native speakers within the school environment. Speaking English as non-natives would promote placing the students in settings, such as bilingual programs, to increase or improve their use of the English language. But the design of early bilingual programs did not always include additive approaches to learning like translanguaging and were subtractive in nature as they minimized the students' use of the home language in an effort to promote the learning of English (Edwards, 2006; Garcia, 2009; García & Wei, 2013). Consequently, the figured world of the ELL included feelings of inferiority and insecurity as educators equated

Spanish speaking with low academic performance. Educators felt that in order for ELLs to properly learn English, they needed to separate their home language or primary Discourse from the language they were learning or their secondary Discourse (Gee, 2012).

The figured world of public schooling for the ELLs was negative and damaging. It was not uncommon to see subtractive bilingualism in schools, and students were often punished if they used their native language during the school day impressing upon them that neither they nor their languaging practices were appropriate for public schooling (Edwards, 2006; Garcia, 2009; García & Wei, 2013). At school, the ELLs became part of the figured world that identified them as students with deficits who needed to learn English, and they were often denied the opportunity to engage in their dominant language practice because it was considered inappropriate to academic learning. So by labeling their languaging practices as inappropriate, the schools were labeling the identity of the students as inappropriate as well as it was impossible to separate the person from their language (González, 2006). With the implementation of subtractive bilingualism, ELLs often felt stigmatized for not speaking the dominant language, and they were considered by many to be lazy or impure and felt embarrassed for trying to speak English which often led to a low self-esteem (Edwards, 2006). The negative labeling and stigmatized culture essentially stripped the ELLs of the opportunity to use their available languaging resources to demonstrate that they could effectively communicate with peers or their teachers if given the proper opportunity (García & Wei, 2013). The most detrimental consequence of subtractive bilingualism encouraged the bias that Spanish was inferior to English. Because languaging practices were inextricably connected to identity, the negative stereotype of promoting an English only learning environment also affected the identity of ELLs enrolled in US school.

As researchers and educators started to learn more about second language acquisition and the value of students drawing on all their available language resources to communicate with others, the learning environment started to become a more positive space for ELLs. What did not change, however, was the fact that for those ELLs who were *transfronterizos* and enrolled in US schools, the issues surrounding why and how they moved greatly affected the figured world they created as *transfronterizos*. The next section discusses how the identity of being a learning transnationals and *transfronterizos* is connected to learning.

Transfronterizos.

The Texas/Mexico border is defined based on demographic data from the 2010 Census that shows the continuous state of change among its residents. More specifically, the Juarez/El Paso border was identified as a specific space within a 25 mile radius of the dividing line between the United States and Mexico (Staudt & Coronado, 2002). Researchers studying the border community indicated that based on the 2000 Census, as many as 14 million people lived along the border from California to Texas (Staudt & Coronado, 2002). This staggering statistic greatly impacted not only the families who immigrated to the US, but it greatly affected our schools as they attempted to meet the needs of this diverse student population.

While educators started to encourage a more stimulating and accepting learning environment by promoting the use of translanguaging, ELLs who were also *transfronterizos* enrolled in US schools were still affected by many factors outside of their control. I noted specifically that although Wilson High School student Ramón, loved music, he was not part of the school's band. When I asked him why, he made a face to imply that he didn't want to do that. He explained that instead he joined a band with friends from his old neighborhood because "things are better over there" (Field notes, 5/8/17). Unique to living along the US/Mexico border

in Texas was the opportunity to experience two cultures regardless of what side of the Rio Grande you were living, but for whatever reason it seemed that Ramón was not able to enjoy the benefits of living within close proximity of two cities from two different countries. Ángel, another Wilson HS student however, often spoke about going to Mexico regularly to visit his family and he smiled when he talked about his cousins crossing the border for sleep overs. Two distinct cultures, two figured worlds often came together seamlessly as families learned to merge everything from favorite foods to favorite music from both sides of the border. The idea of a *transfronterizo* is common to border communities, yet *transfronterizos* have their own unique identity within their figured world as they may share commonalities in agency and motivation to support their family. *Transfronterizos* share common practices, and they can easily identify with the struggles they share with other families who maintain connections between two different countries. This section defines the subtle differences between a *transfronterizo*, a transnational and a recent immigrant. A history of the recent violence in Juarez is presented as a possible motive or connection to families moving to the US from Mexico.

A *transfronterizo* is a border crosser who lives, studies and/or works on both sides of the border keeping cultural connections and social ties to both communities (Araujo & De La Piedra, 2013; Relaño Pastor, 2007; Zentella, 2009). Similar to the *transfronterizo* is the transnational who lives in one country but travels between two countries at will often maintaining allegiance to the home country and the host country (Esteban-Guitart & Vila, 2015; Levitt, 2004; Viruell-Fuentes, 2006). The *transfronterizo* crossed back and forth sometimes on a daily basis and their identity was distinct from the two countries in which they travelled as they develop their own *transfronterizo* identity despite the fact that their allegiance was generally aligned with their home country (Esteban-Guitart & Vila, 2015). What may have seemed laborious to most home

bodies might actually have been quite the norm for families who had been *transfronterizos* for years and embraced the constant back and forth between two cultures. For many people, however, the term *transfronterizo* or transnational was not as common to them as the term *immigrant* to reference someone coming from another country. A recent immigrant was a person who had moved from their country of origin to the “host country” to live permanently (de la Piedra & Guerra, 2012). Texas public schools did not refer to immigrant students as *transfronterizos*, rather the Texas Education Code deferred to the school’s Language Proficiency Assessment Committee to evaluate an incoming recent immigrant to determine what kind of language intervention they needed (Chapter 39.027. Texas Education Code, 2013). Should a student be identified as Limited English Proficient, the school would offer Bilingual Education Services (Chapter 39.027. Texas Education Code, 2013). But the Texas Education Code also specifically referenced those students who recently immigrated to the US as “students who have enrolled in a Texas public school no more than 12 months since the administration of a state assessment” (Chapter 39.027. Texas Education Code, 2013). This definition was based on the need to academically assess all students, even those students who recently immigrated to the country. But the fact of the matter remained, that the enrollment of *transfronterizo* students or recent immigrants was unique to border communities.

Enrolling in a new school was challenging for any student, but the challenge was greater for the children of *transfronterizo* families. The Texas Education Code requires schools to provide ELLs with the instructional support necessary for them to succeed in school. But high school students who were identified as recent immigrants nonetheless had to be assessed in English (Texas Education Agency, 2017) and because they did not speak the dominant language, they were often labeled as at risk learners and placed in subtractive learning environments

(Edwards, 2006; Garcia, 2009; Grosjean, Bhatia, & Ritchie, 2004). As new enrollees enter into a new school, their status within their learning environment already reflected an ascribed identity casting them into a figured world of struggling learners. Without fully investigating what content knowledge the ELLs actually knew, the assumption was too often that they were lacking in skills and should be placed in remedial classes (Gonzalez et al., 2005). Smith and Murillo (2012) reported that US school often assumed a deficit perspective when it came to ELLs even though their academic records from Mexico indicated an uninterrupted L1 education prior to enrolling in the US school. Some educators might have carried deepened ideologies regarding immigrant students or their learning ability, and those educators may have struggled to find an additive perspective that they could apply to help the ELLs find success in their new school. The stigma of coming from another country was difficult to overcome especially when preconceived ideologies erroneously assume that the students did not have the capacity to learn as compared to their English speaking peers. The figured world to which they belonged was detrimental and damaging as it mirrored their social status within their school.

Transfronterizo families and students have faced unique challenges that impacted their figured world socially, economically and academically (Araujo & De La Piedra, 2013). To minimize the stress of being separated from loved ones, *transfronterizos* often maintained ties to their home community by traveling back and forth for work, pleasure or even school maintaining membership in two figured worlds (Bejarano, 2010). Learning to overcome loss of identity by living between the two figured worlds, *transfronterizos* could overcome struggles and obstacles by maintaining a focus on the potential benefits to their families of living in one country while still having access to another. While the figured world in their host country focused around negative ideologies surrounding ELLs, their status within their figured world in their home

country may have changed as they were able to attend school in another country that was perceived to offer greater learning opportunities for students, especially ELLs. As researchers learned more about the benefits of bilingualism, opportunities were advancing that started to provide ELLs with more accepting approaches to language practices. The next section presents a review of the literature as it pertains to project based learning, an approach to learning that can support the languaging practices of ELLs. Information is presented on the various approaches to collaborative student learning beginning with the historical influence of Dewey (1938) leading to our present day practice of project based learning.

Review of the Literature: The Context of Project Based Learning

Collaborative Learning

The project method.

Dewey recognized that learning had to be practical in order to be functional. To effectively resolve a task, a clear understanding of the nature of the problem was imperative so that learners could actively participate in implementing possible solutions, essentially attacking the task with purpose, hence to view it as a project (Kilpatrick, 1918). The Project Method was based on the idea that academic learning was not enough (Hugg & Wurdinger, 2007; Kilpatrick, 1918) to produce a learner who was to contribute positively to the workforce. According to Kilpatrick (1918) the goal of education was to provide a worthy education leading to a purposeful life. Teaching the students, regardless of their languaging ability, how to solve applicable problems within society would promote purpose and value in their lives. A comprehensive approach to learning was most effective as a confluence of academic learning and knowledge gleaned from real world experiences so that students could understand not only what they were doing, but why they were doing it as they applied their learning to the world in

which they lived. The Project Method used a very simple four part design called the Dewey Pattern of Inquiry (Dewey, 1938; Hugg & Wurdinger, 2007) to guide the learner through the process of solving the problem. Once the task was assigned, students invoked Dewey's Pattern of Inquiry (Hugg & Wurdinger, 2007) where they first identified the problem. By identifying what clearly needed to be resolved, only then could the learners could start to suggest possible resolutions to the task.

The second step of the Pattern of Inquiry included the learners negotiating how the resolutions could be implemented as part of their plan to solve the problem. Dewey stated that "Without a problem, there is a blind groping in the dark" (Dewey, 1938, p. 3), so the task of identifying the conflict was critical in developing a plan to find a solution. Once the problem was clearly identified, the students moved on to the third step in the Pattern of Inquiry to test their plan by identifying real world assumptions and questions regarding the issue (Hugg & Wurdinger, 2007). Again, the task or project had to revolve around solving an authentic real world problem. If students were to work collaboratively to solve a hypothetical problem, the student engagement would become what Dewey called, "dead work" or busy work (Dewey, 1938, p. 3). If the situation was not based on actual lived experiences, then the merit of the task was immediately diminished and the primacy of the event was quickly forgotten by the learner.

At the completion of the project, step four of the Pattern of Inquiry asked that the students reflect in a structured manner on the path they selected to solve their problem to determine if that was the best route to take to bring resolution to the issue (Hugg & Wurdinger, 2007). By embracing the inquiry method, learning became transformative as students collaboratively applied academic knowledge to solve an authentic and real world problems (Dewey, 1938; Hugg & Wurdinger, 2007; Kilpatrick, 1918). The Project Method offered an

enriching learning experience that not only benefitted the student, but provided practical advantages to society as well. Dewey acknowledged that his project method showed that learning was a social phenomenon (Hugg & Wurdinger, 2007), and those ideologies were further developed by theoreticians as they continued to study how learning was mediated by socially and culturally.

Content based instruction.

What was understood to be project work often fell under a myriad of descriptions and configurations based on the intent of the teacher, the needs of the students and even the physical resources required within the classroom to carry out the project. As classrooms became more and more diverse to include several different proficiencies of English language learners, teachers often searched for methods to help them connect various forms of content based instruction (CBI) with project work in an effort to provide a more stimulating instructional environment that led to student learning especially for ELLs (Stoller, 2002). The often used lesson cycle of Initiation, Response and Evaluation (Allwright, 1980; Erickson, 1985) followed closely to the traditional format of didactic classroom instruction and might not have always include any work beyond the classroom assignment that could potentially extend or enhance student learning. But as teachers attempted to extend the learning environment, they searched for approaches to link the lesson to the learner. Connecting the content to semiotic artifacts of project work, such as a poster or report, promoted learning connections for the learners, especially for the second language learners (VanPatten & Williams, 2014) who might have struggled with the academic language or cultural metaphors that were often targeted to mainstream student population (Lakoff & Johnson, 2008; Thorne & Lantolf, 2006).

With the assumption that the goal of the project work was to make connections to student learning, choosing the right design and implementation model of the project was an important instructional decision for the teacher. Stoller (2002) identified various content-based instructional (CBI) project components that supported the learning process for all learners, including ELLs. These components functioned effectively within any project, but valuable content connections might have been lost by the learner if the project was initiated after the delivery of content instruction. If the project components were delivered as the learning was presented to the student, they would be able to connect the new information presented to them to their existing knowledge base and apply new learning to their project.

Along with identifying several instructional project approaches, researchers (Alexander, Kulikowich & Jetton, 1994; Anderson, 1990; Bereiter & Scardamalia, 1993) identified four CBI project components that they believed not only connected to the content but also promoted second language acquisition for ELLs. The first component that promoted content connection was that CBI projects should be organized around a classroom theme to be more effective for student learning (Stoller, 2002). Theme based projects would allow students to see the similarities and connections between the common theme of the assigned project.

The second component of a CBI unit was that a project should be coherent and well organized based on the content material to establish a solid connection to student learning (Anderson, 1990). Any assignment that was well organized resulted in more intentional learning by the student due to thoughtful teacher preparation. An ill-prepared lesson could quickly compromise student learning by shifting the focus from student learning to classroom management. The next key component in CBI project work was understanding the relationship between motivation, agency and interest (Alexander et al., 1994). Understanding the

relationship among these concepts may have explained why students remembered some ideas and not others. If the student felt that a concept was important, they were more likely to assign relevance and significance to that concept should they need to draw on that information later (Thorne & Lantolf, 2006).

If the project work, however, was assigned after the instructional content material was presented, the students may not have understood the significance or relevance of the project material and again might not internalize key concepts with the assumption that the learning had been completed. The final CBI component was very much aligned to Vygotsky's Zone of Proximal Development (ZPD) (Vygotsky, 1978) as the learning sequence should become progressively more challenging. Due to continued accountability pressures, ELLs placed in subtractive learning environments were not often challenged academically. When teachers supported all learners with guided practice and scaffolding tools, the end goal was that the student would ultimately be able to complete the learning task on their own, hence the premise of the ZPD. Stoller's four CBI components were sound instructional tenets with the potential to strengthen the instructional delivery of a traditional lesson.

The four components of CBI were often identifiable among various degrees of classroom project approaches from *unstructured projects* that were defined by the students to *semi-structured and structured projects* that were defined and structured by the teacher. The design of most projects was determined largely by the intent of the teacher and the goal of the unit. Often students were assigned a project that included simply gathering data as in a *text or research project*, or administering a *survey project* or conducting some kind of interview as in an *encounter project* (Grabe & Stoller, 1997; Stoller, 2002). But projects that focused on student agency could lead to *production projects* that involved the creation of a multi-media artifacts

such as a poster, report or essay (Stoller, 2002). *Performance projects* that encouraged student agency and organized intent included developing fashion shows, creating theatrical performances or other performance events. Along those same lines of encouraging student agency, *organizational projects* included forming a club or organization for the students (Stoller, 2002) or organizing a campus event like a debate. Any of the above listed projects led to student learning and provide ELLs opportunities to engage in activities that may strengthen their languaging skills as a result of formal and informal collaboration with their peers. But if the best of projects were assigned after the content instruction had been presented, then learning opportunities may not have been maximized due to the fact that students were no longer acquiring new content knowledge that could be applied to their project work. As teachers searched for projects that engaged the students in the learning process, then factors to consider in the selection of the project was how many of the CBI components were structured within the project and was the project designed to student learning was continuous from the project start to the end. Time and effort were often lost when higher order learning was stopped and students resorted to low order skills like recall to complete their assigned tasks.

Components of sound instructional practices included projects that fostered high order thinking that promoted critical reading and writing where students were able to use their academic language skills in English or Spanish to solve a real world research problem. Collaborative approaches to learning supported language diversity as the learning task focused on shared problem solving regardless of the dominant language of the learners. The four tenets of CBI projects led to strengthening student learning and engagement. By using the project as the instructional lesson rather than assigned after the fact promoted sustained and relevant student learning that was internalized for future reference. Project based learning that included

the four components of CBI projects, often led to heightened student learning where the learners collaboratively engaged in higher order thinking to solve an instructional problem (Krajcik & Blumenfeld, 2006; Thomas, 2000). Creating a PBL unit that was designed around socially mediated learning based on Vygotsky's SCT (Vygotsky, 1978), may have contributed to positive student identity as students learned to take control of their own learning trajectory.

Project based learning.

Most students have worked on a school project at some point in their education. Generally, the students maneuvered their way through the teacher-led instruction, then they were assigned a project after the content had been taught. The assignment engaged the students somewhat on an extrinsic level, but the project itself did not advance or add to student knowledge as the students were not prompted or motivated to discover new learning. The defining difference between the traditional instructional method of assigning a project and Project Based Learning was that rather than assigning a project after the instructional lesson, PBL used the project to teach the instructional content of the lesson. PBL implemented an approach where students would work on a project in collaborative teams to answer a research question or solve an instructional problem (Chung, 2004; English, 2013; Hill, 2014; Kumar, 2006; Tamin, 2013).

Krajcik and Blumenfeld (2006) identified five key components to a PBL instructional approach. The components of an effective PBL started with a driving question that would lead the students to situated inquiry in their quest to solve their academic problem (Krajcik & Blumenfeld, 2006). The driving question had to be relevant to the students and thus based on a real world authentic problem. Problem based learning, however, did not use a driving question but rather presented the students with an "ill defined" problem that they were tasked to solve

(Thomas, 2000). Both approaches nonetheless incorporated what Krajcik and Blumenfeld (2006) stated was the second component to PBL, which was having the students problem solve using situated inquiry as they learned to apply their newfound learning. The third component to an effective PBL was working collaboratively so students could find viable solutions that would not only answer the driving question but prepare them to defend counter arguments. The entire process was based on a constructivist framework as all students started with basic content knowledge about the subject they were studying (Krajcik & Blumenfeld, 2006; Wilson, 1996) and ultimately researched the topic using different modes and methods to add to their knowledge base. Students were encouraged to use multi-media resources to gather research data promoting the fourth component of an effective PBL which was blended learning as the forth component.

When students were provided with the autonomy to use various technological tools to gather data, ranging from computers to tablets to smart phones along with face to face guidance from their teacher (VanDerLinden, 2014), the situated learning environment was fully maximized (Chandler, Park, Levin, & Morse, 2013) to promote multi-sensory student learning. Students embraced the learning process when they were instrumental in determining not only what data was to be collected but also how it should be collected. Finding a relevant source using a smart phone could greatly empower a teenager learning how to maneuver through the investigative process as they scaffolded information that would be consolidated in answering their research question (Chandler et al., 2013).

The final criteria of PBL instruction included having students create a tangible product illustrating how they solved their research question (Krajcik & Blumenfeld, 2006). The final product could be a demonstration of collected artifacts or the development of a multi-media project illustrating how they answered their driving question (Krajcik & Blumenfeld, 2006). As

content experts, the students must present and defend their project findings to their peers and use their artifacts to illustrate how they answered their driving questions (P. Blumenfeld, Kempler, & Krajcik, 2006). The PBL student presentation would provide empirical data for the teachers to document the learning gains of the students. (Thorne & Lantolf, 2006).

Educational practitioners were aware, however, that rarely were instructional approaches to learning confined to one set of unchanging criteria or settings. Dewey (1938) acknowledged this as well when he determined that true learning could not be confined to the classroom setting alone and in order to add value to the instruction, it had to be applied within the social setting of the community (Kilpatrick, 1918). Transitioning from a didactic approach to teaching to the application of real world learning has proven to be challenging. During the 1960s, several attempts were made to reform education to provide a more creative approach to learning. The implementation of a “hands on” (Blumenfeld et al, 1991, p. 373) teaching methodology using interdisciplinary themes suggested that students may have been receptive to this approach, but it was not widely implemented and therefore was ultimately dropped due to lack of support (Thomas, 2000). Garrigós Sabaté and Valero García (2012) demonstrated in their study that teachers acknowledged the complexity involved in the design and implementation of PBL, but without careful crafting of the project, the end result may have resulted in frustration rather than student learning (Holm, 2011). Researchers believed that the hands on approach to learning was not implemented with careful detail to promote full student engagement, so consequently the approach was not sustained by classroom teachers (Blumenfeld et al., 1991; Holm, 2011).

During the 1970s, project based learning resurfaced, not in the educational realm, but in the medical realm (Helle, Tynjälä, & Olkinuora, 2006; Holm, 2011). Its task oriented approach to learning prompted PBL to be adopted as an effective means for training Canadian medical

students in the areas of medicine, science, technology, engineering and mathematics (Boss et al., 2013; Knoll, 1997; Thomas, 2000). Students were presented with an “ill structured problem” (Thomas, 2000, p. 5) in the form of a sick patient. With their instructor acting as a facilitator, the students collect information based on the information provided, study test data and other pertinent information to generate a diagnosis. The active engagement in the problem solving task was so successful that it was adopted in other areas for training to include architecture, law and business (Savery, 1996). The momentum of the project based approach to learning grew and was extended once again to the elementary and secondary classrooms with an emphasis on depth of learning and intrinsic student motivation (Holm, 2011; Knoll, 1997).

Various designs and formats of PBL were developed to meet the needs of a changing society where educators were learning to merge the project approach and the model for scientific inquiry leading to problem based, case based, content based and discovery approaches to situated inquiry (Grabe & Stoller, 1997; Holm, 2011). Similar to the PBL components identified by Krajcik and Blumenfeld (2006), in 2010 the Buck Institute for Education developed the 7 Essentials for Project Based Learning (Larmer & Mergendoller, 2015). For the past 25 years, the Buck Institute for Education has provided professional development to teachers, schools and districts on the implementation of what they call the Gold Standard for PBL in an effort to promote campus wide and/or district wide support for PBL (The Buck Institute for Education, 2016). As educators were searching for instructional approaches based on meeting the needs of the curricular standards to promote higher order thinking and learning, the Buck Institute then modified their PBL model. In order to establish that PBL could be used as a rigorous instructional approach to learning, the Buck Institute changed their 7 Essentials model to the 8 Essential Elements of PBL (Larmer & Mergendoller, 2015). Figure 4 below is a visual

representation showing how the Buck Institute (Larmer & Mergendoller, 2015) changed their PBL models of learning.

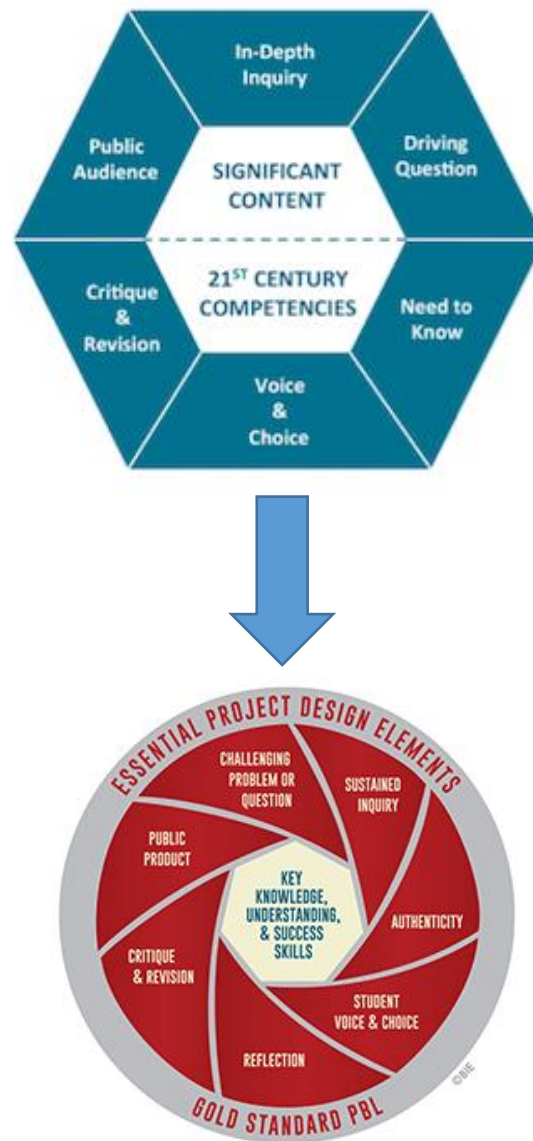


Figure 2.1 Transition from Seven Essentials to PBL to Eight Essentials Elements of PBL (Larmer & Mergendoller, 2015).¹

¹ Copyrighted Buck Institute for Education.

In an effort refine the approach to the implementation of PBL the Buck Institute decided to change the approach to what they are referring to as the Gold Standard PBL (Larmer et al., 2015). Significant to what the Buck Institute considered the foundational components of PBL was the change from Significant Content and 21st Century Competencies to the more global ideology of Key Knowledge, Understand and Success Skills. Although successful skills could encompass a variety of actions, rather than use the concept of *21st century competencies*, the Buck Institute (Larmer & Mergendoller, 2015) focused on a more comprehensive approach by using the terms *success skills* to learning that included a wide range of activities from thinking critically about specific subject content objectives to working collaboratively to solve a distinct problem uncovered in the learning process.

With the focus now on problem solving, the Buck Institute (Larmer & Mergendoller, 2015) decided to broadened the idea of starting with a driving question to starting with an essential question or even to frame the purpose to solve a content problem (Larmer & Mergendoller, 2015). This change allowed learners more flexibility in the design of the PBL as they can worked toward finding a response to a question or work collaboratively on finding an appropriate method to resolve a situation. Another important component critical to PBL instruction was to have students present their findings to their peers. The revised model included the instructional artifact as a public product rather than to specifically present a completed project to a public audience (Larmer & Mergendoller, 2015). The difference here acknowledged the changes in how students learned and how information was presented to them today within our modern interactive technology. Students could still prepare and present a project demonstrating what they discovered or researched to a public audience, but the new direction allowed them now to post their findings online or to develop a digital blog or webcast that would

be available as a public product of their PBL. The revisions as presented by the Buck Institute attempted to provide educators with an instructional approach and modern perspective to learning that encompassed the necessary rigor present in higher order collaborative work, hence the Gold Standard PBL (Larmer & Mergendoller, 2015). What follows describes a study conducted by Lund in 2016 illustrating how the implementation of the 8 Essential Elements to PBL.

In a study conducted by Lund (2016), the researcher used a hands on approach to learning via PBL to determine how student engagement and motivation were impacted through the implementation of a PBL unit with her 3rd grade class. Lund defined engagement as the physical evidence of motivation noting that there are many types of motivation to include intrinsic and extrinsic (Lund, 2016). The teacher designed a collaborative based PBL unit to be implemented with her third grade students based on the Buck Institute's (Boss et al., 2013) Eight Essential Elements of PBL (Hallerman, Larmer & Mergendoller, 2011). Lund opted to use the PBL criteria for the implementation of her six week PBL unit rather than use a more traditional approach to the lesson. The goal of the lesson was for the students to explore how they could reduce waste at Wilson Elementary School. The students were divided into teams as they each researched a different aspect of waste reduction at school. The researcher identified various themes that emerged in the study regarding the implementation of PBL with her class. She noted that student competence and confidence increased along with student participation. Students were also able to apply what they learned to concepts outside of school demonstrating a motivation to apply their learning. Admitting that the implementation of a PBL is not always a neatly compacted lesson, the students initially struggled to grasp new ideas and concepts as often is the case especially with marginalized populations, but ultimately the students learned to clarify

meaning from one another in order to understand complicated concepts. Through Lund's documented field notes and student observations via audio and video recordings, Lund noted a change in the level of student participation. At the onset of the unit, Lund documented that many students were hesitant to share ideas or to actively participate in the learning. The format of the PBL instructional unit was new to the students, so Lund stated that the students may have been struggling with the changes. Once the students became more familiar with the instructional format of the PBL lesson, and as they started to better understand the importance of reducing waste, Lund documented the changes in the student behavior that illustrated an increase in student participation and improved self-confidence.

After introducing the lesson to the students, Lund asked the students to share what they learned with their classmates. Lund indicated that only six students volunteered to share information. After the students were able to work collaboratively to research some of the information that had been introduced, they were asked again to share what they learned. This time, several students raised their hands wanting to share what they had discovered during their research (Lund, 2016). Lund also documented that the student responses indicated that the students were not only gaining confidence, but competence as well as their answers and comments were directly related to the instructional material. Allowing the students to collaborate with each other encouraged creative and critical thinking promoting an increase in self-confidence and active student engagement.

Since public schools were often subjected to rigorous levels of accountability often at the hands of standardized testing, the student generated PBL presentations were an authentic alternative to the mandates of high stakes testing. Although much of the literature in this review indicated that PBL could lead to authentic student learning, some researcher have expressed

concern about the implementation of PBL. The next section will provide insight to some of reservations concerning PBL.

Project Based Learning in the ESL Classroom

Studies have shown that engaging students in PBL may foster the development of higher order thinking and relevant student collaboration where the students focus on their languaging strengths rather than weaknesses (Edelson & Reiser, 2006; Hammar Chiriac, 2008; Krajcik & Blumenfeld, 2006). By not including ELLs within a rich learning environment such as PBL, the achievement gap between the dominant students and ELLs may very likely widen as dominant students continue to thrive while ELLs continue to fail (Ruiz, 2005). To demonstrate the impact of variable instructional strategies on ELLs, I turn to a study conducted by Campbell (2012) that focused on the restructuring of a struggling high school with a large ELL enrollment. The school in this study consistently failed to meet the state's academic standards for five years, the district decided to close the school (Campbell, 2012). The school reopened as a New Tech school with an integrated PBL focus in an effort to promote active student engagement using authentic real world tasks rather than relying on rote memorization as the means for student learning. To show the effect of adjusting the instructional approach to learning, a related study on comparative instructional methods contrasted the impact of active conversational practices of ELLs from two different Spanish classes. The study showed a dramatic contrast of the languaging practices within the two different classroom settings. One of the classes focused on traditional teacher led instruction where the students used their languaging practices to complete conventional language skill and drill assignments. The students in the other class did not focus on customary language drills and instead were directed to use their languaging practices to speak with their peers about the content of the instruction. The researchers discovered that the students who engaged in

conversations with both native and non-native speakers more successfully used their languaging practices than did the students learning in the more traditional classroom setting (Call & Sotillo, 1995). A similar study also showed that when students participated in instructional practices such as talk and turn, they were able to again successfully use and practice their language and literacy as they engaged with their peers rather than work individually on classroom assignments (Leow, 2001). The studies by Call and Sotillo (1995) and Leow (2001) were relevant to the restructuring of the high school in the study by Campbell (2012) because the research demonstrated how using language as a social practices contributed to successful student engagement within a PBL setting. In order to initiate comprehensive restructuring for what was once a struggling campus, the district not only implemented the PBL New Tech program, but they focused on strengthening the students' languaging practices by engaging them in collaborative forms of communication with one another.

Another instructional paradigm shift was shown in the narrative by Welsh and Newman (2010) as they explained how a teacher changed her classroom instruction to meet the needs of her 8th grade ESL science students. The teacher in this study realized that her teaching was based on a deficit perspective, and when she started to accept what the students could do rather than what they couldn't do, she immediately noted their positive engagement to the learning process (Welsh & Newman, 2010). As a science teacher, she recognized that the student learning was stagnant when she tasked the students to search for answers to her questions from the text book. Wanting to create opportunities for active learning, she worked to develop learning environments where the students were working together in more meaning thematic based tasks, much like PBL, rather than just answering questions from a book. The shift in her classroom instruction paralleled the changes implemented in Campbell's study (2012). In order

to restructure the learning environment of her classroom, the teacher learned to implement SIOP strategies (Welsh & Newman, 2010). Although often used as strategies for ELLs, the teacher in this study recognized that many of the SIOP strategies could support all students, including ELLs, to create engaging relevant language and literacy activities that could be applied within a PBL setting.

The implementation of SIOP strategies also played a significant role in the study conducted by Velez (2010) where he observed the impact of the SIOP strategies on marginalized learners within a California New Tech classroom. New Tech Network schools work collaboratively with school communities to create authentic and creative learning environments for the students. The study showed that students of Mexican descent who received instruction on inter-disciplinary thematically designed PBL units with characteristic of the components of CBI outscored those students who did not receive instruction based on a thematic approach to learning (Henderson & Landesman, 1992; Velez, 2010).

Additionally, studies also reported that students who actively engaged in PBL projects enjoyed working on the projects because they were able to engage in purposeful conversations as they collaborated with their peers (Campbell, 2012; Petersen & Nassaji, 2016). Petersen and Nassaji (2016) further examined the attitudes of 30 ESL teachers and 88 students regarding their beliefs about PBL instruction in a Canadian classroom. The researchers found that the teachers favored PBL instruction more than the students. The researchers reflected on the disparity between the reflections of the teachers and students and surmised that when asked about their attitudes toward PBL, the ELLs may still have struggled with understanding cultural metaphors as they worked on their PBL tasks and that may have been reflected in their feelings about PBL (Thorne & Lantolf, 2006). The comprehensive research from this study, however, reflected that

both teachers and students still had positive attitudes about PBL collaboration as reflected in the Campbell study (2012). The teachers of the study reflected that PBL was an effective strategy to be used with ELLs to engage them in authentic language practices within a PBL classroom learning environment (Petersen & Nassaji, 2016).

Velez's research (2010) also focused on teachers of ELLs as he examined how they could modify their classroom instruction using SIOP strategies within the school's PBL setting to improve student performance (Velez, 2010). As the teachers in the study worked to develop scaffolds to promote student learning, they first analyzed student work samples, generated a list of writing errors, selected and implemented instructional strategies to enhance vocabulary and writing, engaged in debriefing sessions to reflect on and make changes to their teaching, and repeated a qualitative action research cycle to see whether student writing would improve as a result of their collaborative work. The study illustrated that although project based schools can be effective with the general student population, research showed that the ELLs continued to struggle (Velez, 2010). Without sheltered instructional strategies, the ELLs continued to struggle to gain mastery of PBL concepts due to the fact that the academic language was new to them as second language learners. As reported in the Petersen and Nassaji study (2016), the students in the Velez study did not always understand the implied cultural idioms spoken by their English speaking peers as reflected in the (Thorne & Lantolf, 2006).

Although the research site in the Velez study (2010) had previously experienced significant student success as a New Tech Network school, the long term ELLs continued to struggle within the program. Research supported the fact that long term ELLs often struggled to demonstrate language proficiency (Olsen, 2014). It is important to note that at the time of the study the SIOP strategies had not yet been fully implemented at the New Tech schools in

California. The fact that this research was studying the connection between SIOP strategies and student learning showed promise in how to best provide support the language instruction of marginalized student learners. With the implementation of instructional scaffolds, ELLs may be better able to make those critical connections between new content knowledge and information that they already possess. As their capacity as a learner strengthens, so does their self-image as a student within their figured world. Positive learning experiences for the ELL may lead to a developing self confidence that can lead to more engagement and ownership of the learning process.

Summary

This chapter included the three theoretical frameworks that guided this study based on the following research questions:

Overarching question: How do oral and written interactions in a New Tech classroom shape the academic language and literacy development of ELLs?

Sub-questions

- What are the oral and written language and literacy practices that New Tech students use to complete their PBL tasks?
- In the context of the figured world, how do ELLs demonstrate solidarity and status in their language and literacy practices?

To better understand how students used languaging practices to make meaning, information was presented on the use of code-switching and translanguaging as social communicative practices to address the over-arching research question and first sub-question. Using the linguistic exchanges presented in Zentella's study, *Growing up Bilingual* (1997), information was presented on how

the code-switches practiced by the students demonstrated intentional shifts that contributed to their meaning making. Contextual information was presented regarding translanguaging and researched showed that the binary between L1 and L2 was shifting to recognized translanguage as its own languaging practice. Information was presented regarding Discourse analysis and how by studying the intent of social languaging references to solidarity and status could be inferred through the conversational exchanges of ELLs to address the second sub-question. The allegiance to solidarity or the reflection of status through languaging practices closely reflected the social significance of language to a figured world. Information was included about the figured world of ELLs as *transfronterizo* students enrolled in US schools.

Finally, the second half of this chapter included a review of the literature regarding the various approaches and implementation of PBL. The literature review provided information regarding the historical context of collaborative project work beginning with the philosophy of Kilpatrick (1918) and Dewey (1938) in their seminal work with The Project Method. Dewey stated that learning had to have a purpose and relevance within society. The literature has indicated that through PBL, students are tasked to solve real world problems as researchers (Krajcik & Blumenfeld, 2006; Larmer & Mergendoller, 2015; Thomas, 2000) as schools develop what they feel is the best approach to learning. Although there are subtle differences within the PBL approach, the empirical studies reflect that students can successfully engage in academic language and use disciplinary literacy within their PBL team through the use of their translanguaging skills. García and Wei (2013) argued that by drawing on all available linguistic resources, the ELLs were able to use their languaging skills to become active researchers rather than the passive learner. The implementation of a PBL approach to learning can lead to authentic

student engagements where students may be able to discover that they are valuable members of the classroom culture and that they are competent student learners.

Chapter 3: Research Design and Methods

This study sought to explore how the oral and written interactions within a project based learning setting shaped the use and development of language and literacy of ELLs who historically had been marginalized and subjected to deficit notions of learning. Additionally, this study explored how students used language and literacy in their New Tech classroom and how those language and literacy practices may have changed over time.

This chapter presents the research questions and describes the research design, data collection methods, and data analysis procedures of the study. This chapter provides a rationale and justification for the chosen research design and selected research site and selection criteria for the participants. Data collection methods are presented, and data analysis procedures are described. The chapter includes a discussion of ethical considerations pertinent to the study along with a description of the role that my positionality plays in collecting data. The chapter ends with a description of the issues central to reliability of this case study.

This study addresses the following research questions:

Overarching question: How do oral and written interactions in a New Tech classroom shape the academic language and literacy development of ELLs?

Sub-questions

- What are the oral and written language and literacy practices that New Tech students use to complete their PBL tasks?
- In the context of the figured world, how do ELLs demonstrate solidarity and status in their language and literacy practices?

Methodology

In this section, I describe the ethnographic case study design that was used for this study. In addition, a description and history of the research site is provided along with information on the selected focal group participants. An explanation is provided to include how ethnographic tools such as participant observation, interviews and artifact collection were used to in the data collection process. Finally, I explain how I used open coding to develop initial codes. I then explain how I used a focused coding approach (Emerson, Fretz, & Shaw, 2011) to understand how Gee's Discourse analysis of contextualization signals and thematic organization was evident in the students' language and literacy practices. Through focused coding, the theory of figured world (Holland et al., 1998) surfaced. Again through focused coding, I analyzed the data to identify how their language and literacy practices were connected to status and solidarity of their figured world. Included in this section is a discussion on how my previous position as a high school principal affected my role as a researcher.

In planning my study, I knew that I was interested in learning more about the instructional delivery within a PBL learning environment such as New Tech. But more importantly than learning about a program, I wanted to know more about the languaging practices of the learners which populated such a program (Patton, 1987). I had a working knowledge of PBL as a former high school principal, but I was curious to learn more about how a PBL classroom environment was connected to the languaging practices of ELLs. The driving force behind my curiosity was not to prove a standing hypothesis but more along the lines of discovering the connection between a PBL classroom and the languaging practices of ELLs. I wanted to know more about *how* a PBL classroom setting could be used to support languaging practices of ELLs, and more importantly I wanted to understand *why* such a connection could

contribute to developing language and literacy practices of its learners. As part of my research, I wanted to delve into the classroom and explore the nuances of the students' learning environment so that I could understand the complexities and idiosyncrasies of their daily rituals to be able to accurately describe their stories (Babbie, 2014; Patton, 1987). Babbie (2014) states that the research question would drive the design of the study, therefore, because I wanted to learn more about New Tech, explore the language and literacy practices within the program and to be able to tell the stories of student learning through the eyes of the participants, the design for this study was qualitative in nature.

Ethnographic Case Study

In this study, the methodology that was most appropriate to address the research questions was an ethnographic case study. Ethnography is about searching for interrelated themes (Heath & Street, 2008), and through participant observations, a prominent tool of ethnography, I was able to observe how patterns and routines shaped languaging practices and developing identities of the participants of this study. Frank (1999) argued that in order to fully understand a culture, it was important to become part of that cultural world to better understand the perspectives and motives of its members. Using an ethnographic approach allowed me to become immersed in the everyday activities of the students as they engaged in their PBL tasks. The goal of ethnography was not to anticipate human action but rather to observe human behavior in order to develop a better understanding of cultural norms and motives (Agar, 1996). Pairing ethnographic methodology with a case study that was focused on a program like New Tech would allow me to understand how the oral and written interactions within the classroom setting shaped the use of language and literacy practices of the WNT students (Lichtman, 2013). As an ethnographer, I would be able to observe and describe the interactions that the ELLs used

in their classroom in an attempt to gain insight from an emic perspective on how they viewed their PBL interactions and how those languaging interactions were used to complete their projects. The insider perspective of an ethnographic case study methodology also allowed me to observe and document how the ELLs' language and literacy practices developed over time as a result of their oral and written interactions. By gaining an insider perspective to the interactions of the ELLs, the unfamiliarity of using their language and literacy practices in their New Tech classroom became less strange and more familiar through my detailed thick descriptions and observations (Geertz, 1973).

The unit of analysis for this bounded ethnographic case study (Stake, 2005) was one interdisciplinary English/Social Studies combination classroom during the spring 2017 semester that included a team of four focal students. In order to understand more specifically how student interactions were connected to language and literacy, I decided to take a more focused approach and identify one PBL team consisting of four ELL students that could function as a focal group of students within the broader case study of the New Tech classroom. By observing one student led team as a focal group, I was able to see first-hand as an insider how the Wilson New Tech program provided these ELLs with an interactional space where they were able to use their language and literacy practices for meaning-making and communication. Focusing on the languaging interactions within the focal group of students provided clarification as to how the structure of the New Tech classroom was connected to the language and literacy of ELLs.

Merriam (1998) argued that a case study could take two approaches. A case study could provide a causal explanation (Babbie, 2014) of how participants responded to specific stimuli or it could focus on a process by describing in detail how a certain population or environment had been affected by some kind of treatment or event (Merriam, 1998). This study addressed how

PBL was connected to the languaging practices of the students. This ethnographic case study addressed the “how” and “why” (Yin, 1994, p. 7) of the research question that helped me to better understand how the oral and written interactions used by the students shaped their use of language and literacy and why such interactions were connected (or not) to the use of language and literacy.

An ethnographic case study can provide an emic perspective over time of various social situations within the specific cultural world of Wilson New Tech that may explain how and why ELLs engaged in specific activities and interactions within their classroom setting. The ethnographic case study may also provide evidence to illustrate what language and literacy practices were used over the course of the learning process as a result of team interactions as students solved their PBL tasks. This study provided a close analysis of the students’ languaging interactions along with a wider analysis of what it was like to not only be a member of the WNT, but how the classroom and the campus environment contributed to the language and literacy of the students practices (Frank, 1999). This study addressed the research questions by combining the macro/micro approaches of this ethnographic case study. By incorporating an ethnographic case study I was able to better understand how and why student interactions within the Wilson New Tech program were connected to the use of language and literacy practices of ELLs and how and why those practices may have changed over the course of the study.

Research Context

Wilson High School.

As a researcher, it was important that the selected research site include ELLs learning within a PBL instructional format. The setting that best met this criteria was Wilson High School in west Texas, a comprehensive high school serving grades 9 – 12 with an enrollment of 1,205.

At the time of the study, state reports indicated that 78.9% of the students were considered to be economically disadvantaged and almost 49% were identified as English Language Learners where both percentage indicators were well above the district and state average. In addition, the school carried a large number of “at-risk” learners, also well above the district and state averages. Table 3.1 illustrates the demographic data comparisons between the sub-populations of Wilson High School in comparison to the district and the state.

Table 3.1: Sub-Population Demographic Data

2015-2016 Student Data Comparison			
	Wilson High School	District Average	State Average
At-Risk Learners	82.3	58.7	50.1
Economically Disadvantaged	78.9	70.6	59.0
English Language Learners	48.7	27.3	18.5

The primary language of many of the families surrounding Wilson High School was Spanish, and consequently the general public assumed that the students attending the school not only had language deficits but learning deficits as well. Since the majority of the students were minoritized students of Mexican heritage, they were often easy targets to marginalize by the public, the media and sometimes by their own teachers. The general public continued to

stigmatize Wilson HS because the majority of the students enrolled in the school were considered economically disadvantaged. In fact, negative public perception regarding district high schools reached a climax due to the fact that several district employees, including the former district superintendent, were convicted of fraud in fixing federal and state test scores for a better accountability rating from 2006 - 2012.

After No Child Left Behind (NCLB) was signed into law in 2002, educators were looking for successful formulas to ensure positive student performance in an effort to avoid federal sanctions for not meeting Adequate Yearly Progress (AYP). Data reflected, however, that high poverty and high minority schools, much like the schools within the city, were most likely not to meet AYP standards (Stecher, Vernez, & Steinberg, 2010). The corrective measures assigned to schools for not meeting AYP started with assigned instructional interventions by district officials to improve student performance (Stecher et al., 2010). Notwithstanding, the impact of the district scandal and convictions of those involved prompted the district and its high schools to move forward. Specifically, the district moved to strengthen the academic programs within its schools to include adding the Wilson New Tech program in 2016-2017 as part of the instructional design of the school to better serve the students of the community.

Wilson New Tech.

The New Tech Network (NTN), founded in Napa Valley, California in 1996, is a nonprofit organization that works with over 200 districts and school across the US (The New Tech Network, 2017). The NTN provides schools with services and support to provide a more creative approach to learning that includes interdisciplinary project based learning rather than the traditional teacher led instructional format. New Tech High Schools have been structured to implement the instructional tenets of the NTN to include content standards, collaboration, critical

thinking, oral communication, written communication, career preparation, citizenship and ethics, and technology literacy (The New Tech Network, 2017). Figure 3.1 illustrates the NTN approach to learning.

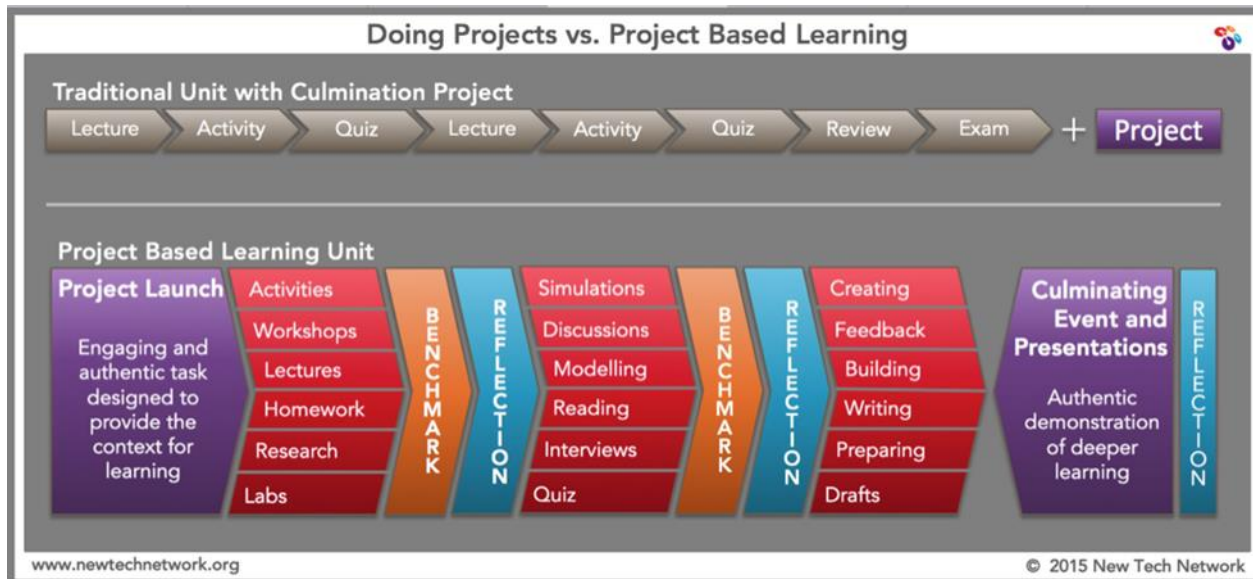


Figure 3.1: New Tech Network PBL

The NTN contrasted the “traditional” approach to learning with PBL methodology. In the traditional model, the lesson usually started with a teacher lecture followed by a variety of activities leading to a unit quiz or test while the students were seated in their desks. The instructional approach of the NTN model, however, was centered on PBL where students and teachers alike engaged in professional learning communities and learned in classrooms that were equipped with state of the art integrated technology (New Tech Network, 2012). The students in the NT schools worked on PBL activities throughout the learning process to reach their assigned benchmarks and continuously reflect on their learning process. Unlike the teacher led approach in the traditional lesson cycle, the NTN model was based on student led PBL research, giving the students the opportunity to exact agency to make decisions about their own learning.

As part of the initiative to reverse struggling academic performance and negative public perception, Borderland ISD was searching for instructional programs that would stimulate the learning environment within the district. The year before the district opened Wilson New Tech (WNT), they had already successfully implemented the NT program at two other high schools. When I first met Dr. Jones, he explained that he approached the district with a proposal to start a NT program at Wilson. Although the other NT programs in the district were STEM based, Dr. Jones wanted to capitalize on areas that had already proven to be successful at Wilson High School such as Arts and Humanities. By aligning Wilson High School with a new academic program, Dr. Jones believed that the focus surrounding the school could possibly shift to student learning rather than associate the school with the district cheating scandal.

The Wilson New Tech Classroom.

Once the school was approved to move forward with the implementation of the NT program, the district started to renovate the classrooms over the summer to support the student collaborative learning required of NT learning. The school received district support to implement Wilson New Tech in the form of student technology along with hiring Ms. Smith, the NT administrator whose job was to support the NT program. Despite the work done in the summer to remodel the classrooms for NT, Ms. Smith stated that not all classrooms were completed retrofitted by the first day of school. When I first walked into the WNT classroom, I immediately noticed that it was clearly larger than the typical classroom. Ms. Smith, had mentioned that this space was once two classrooms. To prepare for the PBL instructional format typical of New Tech, contractors worked over the summer to create a makerspace instructional design that provided the students with open spaces for communal student learning by converting two smaller classrooms into one large learning environment (What is a makerspace?, 2014-

2018). The dividing wall that once separated these classrooms had been removed and as part of the classroom re-design, the solid wall that closed off the classrooms from the hallway was now a wall of windows to open up the classroom to provide a clear line of site into the activity of the classroom. The opposite wall looking out to the patio, which the students called the square, was lined with five windows. There were two long tables underneath the windows. Above each table there was a label on the wall that said Norms Manager and Task Manager. As project duties were delegated to student team members, the teachers would direct them to these tables to collect pertinent information for their team.

Although the district had gone to great lengths to create one large classroom from the two smaller classrooms, evidence of the two separate rooms still existed. Walking into this large classroom, one could see two teacher desks on opposite corners of the classroom along with two separate doors as reminders that this was once two rooms. I quickly noticed that there were 42 active bodies in this classroom. This classroom held more students than the traditional classroom consisting of 25 – 30 students, but of course this classroom had two teachers. With the teachers' desks on opposite ends of the classroom, there was plenty of room in between for the students. The traditional student desks were replaced with rectangular tables and chairs. To allow for collaborative work spaces, two tables were put together to make one large table that would comfortably seat a team of four or five students. Under the windows facing the hallway, there were various shelves, cabinets and storage containers. In the corner opposite GEO's desk there were two tall dark colored storage cabinets, although several projects were simply placed above the cabinets. I noticed that on the white dry erase board there was no posted objective, only a list from either an upcoming pizza party or old news from a pizza party that showed what everyone needed to bring. Next to GEO's desk were two Computer on Wheels charging stations

that held the tablets that the students routinely used. The classroom printer was located near ELA's desk and was networked to the student tablets so the students could print as needed. Each teacher had some kind of shelving behind their desks and each of them had personalized their desk with pictures of family or students. The large room was spacious enough to allow the students to move around the classroom freely and provided them with the spaces to encourage their team collaboration.

The WNT classroom was located on the top floor of a building simply labeled Building A. The campus housed four building around the patio or "square." One of the buildings was the gym, the other was used for a business magnet program, and the other two instructional buildings were simply labeled Building A and Building B. Both Buildings A and B had four basic hallways with an upstairs and down stairs. Inside Building A, there were classrooms on both sides of the hallway, but the teachers' lounge and teacher work room were located in the center of the building. I was surprised, however, to find a theatre on the first floor of Building A. The theatre was intimate with a seating capacity of no more than 150 chairs. The chairs were the typical auditorium chairs where the seat flips up with one big difference. The chairs were not made of typical plastic that is all too common in many school auditoriums. The chairs were made of fine grain wood, adding a beautiful warmth to the room. One of the teachers told me later that this theatre used to be the district's only auditorium.

Although the district worked over the summer to prepare the school for the inaugural class of the WNT program, studies showed that high minority schools, like Wilson High School, were often under resourced and too often faced a high turnover of teachers and administrators (McGhee & Nelson, 2005; Welton & Williams, 2015). This was clearly the issue surrounding Wilson High School as several classrooms were still in the process of being re-designed by the

first day of school as the district was trying to meet the needs of the New Tech instructional format. The constant turnover of the campus leadership also did not allow the school to establish and maintain a positive instructional focus from one administration to the next. Every new administration would establish a different approach to meeting the instructional goals of the campus, but with a high turnover in leadership, those strategies were often never realized and negatively impacted the students leaving the campus struggling to meet academic performance goals. With the implementation of WNT, Wilson High School was now on its way to reaching academic success and removing the low performing stigma that the school was trying to shed. The implementation of the Wilson New Tech program was a step in the right direction to dispelling the myths that the students of Wilson High School were struggling learners simply because they were English Language Learners.

Wilson High School had already recruited the team of teachers who would be the inaugural WNT faculty. To prepare them for the upcoming school year, the WNT teachers attended the annual summer NT conference, along with NT teachers from around the country, to learn about strategies, methods and lesson ideas aligned to PBL. After meeting with Ms. Smith, I decided that I would observe the English/Social Studies combination class taught during first period. The English teacher, ELA, was a veteran teacher with 10 years' experience, eight of which had been at Wilson HS. He stated that he had previously worked at a school that served a very affluent community, but he felt that the students at Wilson had a greater appreciation for the instruction they were receiving (Teacher Interview, 4/12/17). The social studies teacher, GEO, had only been working at Wilson HS for the last two years having previously worked as a General Equivalency Diploma (GED) teacher, a grant writer and an at-risk coordinator at another high school. These two teachers were clearly more than co-teachers; they were friends. GEO

mentioned that they would often spend entire weekends together planning their PBL units. Their collaborative synergy was evident within the classroom setting as they supported each other to design the inaugural WNT program. The teachers understood that the New Tech program at Wilson HS would be different from other NT programs because so many of the students enrolled at Wilson High School were ELLs. An opportunity existed to create a New Tech program where students would be provided with space to be able to use their available languaging resources, including code-switching or translanguaging, to make meaning and demonstrate content knowledge learned via PBL. With the implementation of Wilson New Tech program, the school could now focus its efforts to implement an academically structured PBL approach to learning rather than focus on dispelling a negative public perception of the school.

Gaining Access to the Research Site

The implementation of New Tech in 2017 was part of the district's plan to strengthen the academic program of Wilson High School. During the fall 2016 semester prior to data collection, I contacted the principal of Wilson High School, Dr. Jones. I wanted to meet with him to explain my study and to understand his focus regarding the new Wilson New Tech program. He explained how the school was trying to recover from years of negative perception due to the district cheating scandal and felt that with WNT, they had a plan to showcase the school's strengths. He gave me an anecdotal account of the school's history written by an alumnus that captured the school's history from its inception up to the 1970s. Although not a scholarly publication, the book provided many personal stories that characterized the community of Wilson High School. I was anxious to begin my data collection and later emailed the principal to inform him that I would be officially start data collection on Monday, February 6. The night before my first day on campus, I heard the local newscaster state that Dr. Jones would

be reassigned to another high school effective immediately. The next morning, I decided that instead of reporting to the campus, I should call the person in the know, the campus secretary, and ask for guidance about a point of contact. She directed me to the assistant principal, Ms. Smith, who was in charge of WNT, and I scheduled a meeting with her the next day. Ms. Smith was very knowledgeable about the direction established by the Dr. Jones for the new WNT program, and she was visibly concerned about the future direction of the school. The district decided to name one of the other assistant principals, Mr. Martinez, as the Interim principal.

Despite being part of a district associated with a cheating scandal and adjusting to various administrative changes within the school, Wilson High School was ready to move forward with the implementation of their new PBL based program. With the opening of the Wilson New Tech program, students at the school would now have the opportunity to become part of the national New Tech Network. The district had already successfully opened two previous New Tech programs the year before, and preparations were being made to support the New Tech program at Wilson High School.

Data Collection

As an experienced educator and researcher, my position toward student learning was that students were more likely to internalize information if it was socially mediated. According to sociocultural theory, when learners actively engage in an activity, and when they appropriate culturally mediated artifacts as part of the learning process, they may be better able to internalize and apply what they have learned. In order to capture how students interacted within the sociocultural environment of their New Tech classroom as they appropriated language and literacy practices to solve their instructional tasks, various qualitative methods and tools were used to conduct this ethnographic case study. The forms of data collection procedures for this

case study were divided into four basic types of information: observations, interviews, documents/artifacts and other media (Creswell, 2013) that contributed to addressing the research questions. More specifically, information was collected from the participants to help me gain an emic perspective by using various ethnographic tools to include descriptive field notes, participant observation, ethnographic semi-structured interviews, formal semi-structured interviews, collected artifacts both in progress and finished products and focus group discussions to address the research questions. Information was collected from the participants to help me gain an insider perspective of the inner working of the classroom dynamics. Vygotsky (1978) theorized that one of the constructs that affected learning was the appropriation of tools such as language and speech. I, therefore, used these culturally mediated ethnographic tools as part of data analysis to help me uncover prominent themes related to how the students appropriated their literacy practices through their oral and written interactions.

As part of ethnographic methodology, collecting data in the field which included the classroom, the library or any other environment where students were discussing their PBL, provided emic insight into how participating and engaging in PBL was connected to the use of language and literacy for ELLs. By using discourse analysis of the data, prominent themes emerged that could provide a better understanding of the role that the oral and written interactions played in connection to the use of the ELLs' language and literacy practices.

Participant Consent and Selection Criteria

Upon IRB approval, I decided that using a purposive sampling as a selection criteria would be the best option to identify ELLs within a PBL instructional classroom to address the research questions of the study. I scheduled a meeting with the Wilson High School Assistant Principal, Ms. Smith, and I explained that in order to study how English Learners used their

language and literacy practices to solve their PBL research problems, the selection criteria included identifying ELLs within a PBL classroom setting like that of New Tech. Within that class, I further explained that I wanted to follow a four member team as focal students, also ELLs, to see how they used their language and literacy practices to negotiate meaning as they solved their research tasks. By selecting one New Tech class as a case study and then identifying a four member focal team of students within that case, I would be able to see how the students used oral and written interactions within their student team and within the larger classroom environment.

Ms. Smith directed me to the 1st Period combination English/World Geography class of the Wilson New Tech Program. The classroom participants were all 9th graders which was comprised of a heterogeneous mix of males and females with various language proficiencies. The teachers, ELA and GEO, stated that the majority of the students were ELLs, but I noticed that the campus data, however, indicated that only 48.7% of the student population were identified as English Language Learners. As a researcher, observing the interaction of the focal student team would help me understand not only the role that PBL played in the learning process, but to see how students used language and literacy both orally and written to solve their PBL tasks and express their content knowledge. As a participant observer, I would be able to watch and listen to how the students interacted with one another within the Wilson New Tech PBL classroom, and I would be also able to observe how those interactions were connected to the use of academic language and content area literacy within their English/Social Studies class.

Before selecting the focal students, I decided to observe the classroom instruction for a couple of days to understand the dynamics of the learning environment. During the classroom observations, the teachers provided some time for me to describe the study to the students and to

distribute the consent/assent forms to the students. I explained to the students that I would meet personally with their parents after school to answer any questions regarding the study. Out of the 42 students, only one parent showed up to meet with me. I collected 41 out of 42 signed consent forms and contacted the parent of the student who had not returned the consent form. After three re-scheduled meetings with this parent, GEO was able to secure the parent's signature on the consent form so that 100% of the consent/assent forms were signed and collected.

After observing the overall learning environment for a couple of days, I was ready to sit with the students. I decided to join a student team of two girls and two boys in my quest to identify the focal students within the New Tech class. The interaction between the students at my table was positive and informal as they translanguageed continuously to help each other complete their assignments. I was looking for a team that demonstrated open communication amongst each other. I felt this team had the potential to do that although the two girls seemed to be shy in comparison to the boisterous boys. I was looking for a focal team to ideally include a mix of males and females, but more importantly, I was looking for a team of focal students who were ELLs who demonstrated that they could work collaboratively to solve their researcher tasks. After sitting with these students for two days, I felt that I could learn from their interactions as focal students, so I made a note to inform the teachers that the focal students had been identified. The bell rang and the teachers were bombarded with student questions about the assignment, so I decided that I would give them the names of the focal students the next day.

When I arrived the next day, I saw that all the student teams were now different, and the four focal students I sat with yesterday were all on different teams. I decided to sit with another student team comprised of another two girls and two boys. Like the previous team I sat with the day before, this student team also used their translanguaging practices, but this team

demonstrated a high level of interactional energy as the students expressed their opinions to one another and didn't hesitate to disagree with one another either. As this group of students worked on their assignments, I noted that they prioritized their PBL tasks and collaborated despite their differences in how to complete their projects. With two boys and two girls, all ELLs, and a high level of communicative collaboration, I knew this was the ideal focal team for my study. When ELA came over, I asked how often they changed the composition of the student teams. He stated that they changed teams often to allow the students to learn to work with other students. I told him that I liked the student team that I was sitting with and wanted to follow them as a focal team within this class. He stated that they were all ELLs, and he felt they would be a good representative focal group to follow. Although the focal students were all from similar backgrounds, their personalities and strengths were dramatically different which contributed to an exciting dynamic within their team.

The Focal Students

Hadie.

When I first sat with the focal team, they were in the middle of a discussion. I was quickly drawn to Hadie because she was very vocal as she was talking quickly to express her thoughts and ideas to her peers. The fact that she was commanding the conversation within the group led me to believe that she had a firm grasp of the concepts presented by the teachers and wanted to make sure that she expressed her opinions. As the teachers added another component to the assignment, I watched Hadie as her teachers were talking. Her eyes were focused on her teachers almost as if she was transfixed on what they were saying. When the teachers finished explaining the task, she immediately pulled out her tablet to start working on the assignment. Her long black hair complemented her dark skin and dark eyes. Hadie mentioned to me that she

was part of the school's Mariachi band. I saw pictures on the school's Facebook page of the campus Mariachi group performing at school functions and saw Hadie wearing the beautiful mariachi regalia called a *traje* with her long black hair pinned up with a vibrant red flower. In the classroom, she looked like the typical high school student wearing jeans and a t-shirt.

Her English was perfect, although she often translanguaged when talking to her group. She continuously shifted back and forth with ease between English, Spanish and her translanguaging as she talked with her peers while she worked to complete her assigned tasks. Hadie stated that her first language was Spanish, but she grew up speaking English as well. Garcia (2014) argued that bilinguals were not two monolinguals. A bilingual person was defined as someone with access to multiple languaging repertoires that they could draw from in order to communicate with others. This was exemplified with Hadie. She had a very good working vocabulary in English and Spanish and drew from both to make meaning and communicate with others. Although her primary language was Spanish, she was not coded Limited English Proficient at school. Hadie and her four younger siblings all lived with their Spanish speaking grandparents who were their legal guardians and were referred to as "ma and pa" (Hadie, Interview 2). She stated that because her parents were English speaking, she grew up speaking both languages and felt that she could still communicate in either language. Although she had always lived in the Wilson community, she stated that they moved around from various houses/apartments within the neighborhood over the years. The house she lived in was walking distance to school and in the epi-center of all the Wilson community activity. "[E]verything is so close. Food City is like two blocks, my Godmother, she's in the next street, then Tacos Don Cuco is in front, then the Auto parts is in the other corner so my grandpa can fix cars, then behind the other street is my little brother's school and then we have Project Vida, a community

center,” (Hadie, Interview 2). So it was clear that she was comfortable living in a community where she felt a sense of belonging and a sense of pride. When asked what she wanted to be she stated that she wanted to be a neurosurgeon or a pediatrician. The fact that going to college was a clear assumption, her professional goals aligned to her confident sense of self. Many times while she was working on a project, she would often celebrate her own accomplishments by raising her hands in victory when she completed an assignment (Field notes, 3/3/17). This affirmative sense of completion showed me that successful participation in school was important to Hadie, and she made sure to celebrate simple accomplishments like finishing her assignments.

Hadie mentioned that she remembers when Wilson HS went to her middle school to speak to her about WNT. Because the program sounded very interesting and was something that she knew could challenge her, she said that she submitted her application to be part of the program. She admitted that initially she didn’t like working in groups (Focus group interview, 5/31/17), but she stated that she ultimately enjoyed all the projects and embraced her role with each assignment. Her teachers also agreed that Hadie was very smart and admitted that they didn’t need to worry about whether or not she would complete her assignments or if she would behave appropriately. She successfully passed all her STAAR exams and was already looking to a future as a doctor. ELA and GEO stated that although she was a very good student, she could sometimes escape a teacher’s radar because she didn’t always draw attention to herself (Teacher Interview, 4/12/17). The only issue that the teachers felt Hadie needed to overcome was the fact that she often prioritized her friends over her school work. She always eventually completed all her school work, but if her friends called on her, she would go with them instead of dedicating her time to her studies. But when she dedicated her efforts to her learning, she was insightful and perceptive when learning new concepts.

Jessica.

Compared to other members of the focal team of students, Jessica was considered to be by her own admission somewhat shy and resistant to working with others. She was very petite, likely not even five feet tall. She had long light brown hair and green eyes that were contrasted by her fair complexion. She said that on the first day of school of her freshman year, she discovered that she was not in the volleyball class with the rest of the team. Her coach encouraged her to see her counselor who informed Jessica that she had been placed in a new program called WNT. She stated that when the WNT students were first assigned to work in groups, she was very hesitant to do so because she knew that she could work better by herself. Over time, she learned to work with others and even delegated project tasks to other team members to ensure the assignment was completed. I often observed Jessica working on her class work or homework while other students were talking with friends or taking a break. She was a very conscientious student as she always prioritized her school work. When the students would take a break at the half way point of their double block class period, Jessica always stayed in class to work on her assignments. Jessica did not carry the LEP coding and during her freshmen year she passed all her state exams. In the summer after her freshman year, she also passed the Texas Success Initiate test at the local community college allowing her to enroll in Dual Credit classes at Wilson High School. These academic milestones would help her achieve her goal of graduating in the top 10% of her high school. She stated that she did want to go to college, but her ultimate goal was to graduate from the police academy to become a police officer. In addition to keeping up with her studies, she kept busy as she was a member of the Wilson High School volleyball team. She stated that she would often stay on campus until 6 pm for volleyball practice in addition to practicing during the summer vacation. Jessica could also be described as

an emergent bilingual (Edwards, 2006). She could read, write and speak English, but Spanish was the language spoken at home. While she demonstrated competence with her English, she often resorted to using her translanguaging to clarify concepts. When asked about her language preference, she stated that she preferred reading and writing in English although she fully understood Spanish. This was surprising because GEO mentioned that he and ELA were concerned about Jessica because she was always speaking in Spanish, and it seemed to them that she didn't want to speak in English. I asked them if it was a problem that she was speaking in Spanish, and they stated that it was not a problem for her to be speaking in Spanish, but felt that her English skills could improve with her use of the language (Field Notes, 3/8/17). Jessica stated that she liked to read Japanese Manga comic books in English for pleasure and very much enjoyed those stories. She also stated that she thought she was a good writer, but admitted that she has trouble with the "acentos" or accents (Jessica, Interview 2). Jessica, her mom, step-dad and little brother had recently moved into a brand new apartment building near Wilson High School. She stated that they lived there previously, but the original complex was demolished so they could build a new complex. Her father worked at a Chinese restaurant and her mother stayed at home taking care of Jessica's younger brother.

GEO and ELA stated that they were very proud of Jessica's work ethic. Their only concern was that she was so shy and reserved that she did not often seek help and support when she needed it. She admitted that she needed to "have more agency to finish" (Jessica, Interview 2). So it seems that she was aware that she needed to learn to ask for help from others to allow her to reach her academic goals but was generally too shy to ask for help.

Ángel.

Much like Jessica, Ángel was very quiet and reserved. Seldom would he initiate the dialog within his team and more often than not would fall into the background and listen to the on-going dialog rather than participate. Despite the fact that he was so quiet, he was a member of the school soccer team. His thin build very likely supported the intensive running that was typically required of a soccer game. Ángel had very short dark hair neatly combed to the side and dark colored turned down eyes that sometimes made him look like he was sad. Although Ángel spoke English well, rarely did I hear him speak in English. I read his writing several times and felt he was a good writer in English, but he stated that he only read things that were of interest to him like stories about soccer players or soccer teams. While he understood and spoke English, he still preferred to read, write and speak in Spanish as he was more comfortable in his primary language a characteristic typical of the emergent bilingual (Edwards, 2006). Of the four focal students, Ángel was the only student to carry the Limited English Proficient coding. Consequently, he was often pulled from the regular classroom instruction for the administration of the Texas English Language Proficiency Assessment System (TELPAS) test that was designed to use Proficiency Level Descriptors (PLDs) such as beginning, intermediate, advanced and advanced high to measure the linguistic proficiency of second language acquisition for English Learners (Texas Guide English Language Proficiency System (TELPAS), 2017). Ángel stated that he remembered listening to the presentation about the new WNT program at Wilson HS. He stated that he was immediately interested in the program and submitted his application during his 8th grade year.

His dedication to his studies likely came from the work ethic he observed at home. Ángel's parents moved from Mexico to the US primarily to find work. The family had been living at this home which was walking distance to Wilson High School since Ángel was three

years old. Ángel enjoyed his neighborhood as it was filled with “gente muy bonita” (*beautiful people*) (Ángel, Interview 2). At home Ángel lived with his parents and his 23 year old brother and two elementary aged sisters. His father worked in the roofing business while his mother worked in a local restaurant. Ángel applied to become part of WNT during his 8th grade year, and was very serious about his studies. When asked about his future goal, he was very clear, “Haciendo un adulto quiero ir al colegio a estudiar para hacer un médico.” (*When I become an adult, I want to go to college to study to become a doctor*) (Ángel, Interview 2). His class schedule matched his lofty goals to becoming a doctor as he was enrolled in Pre-Advanced Placement English II and Pre –Advanced Placement Chemistry. He also passed all his state exams during his freshmen year where his TELPAS scores were likely factored into his passing standard.

For Ángel, his greatest obstacle was the fact that he was so quiet and reserved. His assignments demonstrated that he understood the material presented by the teachers, but the presentation format required of the WNT program challenged him to move out of his comfort zone to orally demonstrate the knowledge that he had acquired.

Ramón.

When I met Ramón he looked like the typical high school student. He was wearing a plain grey hoodie, and he wore what seemed to be the standard teenage uniform of jeans and tennis shoes. He had a wide face with high cheekbones that accentuated his brown skin and a head of very thick dark hair neatly combed back with styling gel. His stocky build likely served him well as he was part of the school’s NJROTC program. He spoke both English and Spanish and often translanguaged, but to his team members he generally always spoke Spanish. He discovered that he was placed in WNT on the first day of school. He admits that he didn’t like it

at first, but then learned to enjoy the projects. Throughout the semester, I witnessed the students reading and writing as part of their research projects, but Ramón stated that he didn't like to read. I reminded him that he told me that he enjoyed reading *The Odyssey*, but he then qualified his statement by stating that he had to read at school. He said he felt that he was a good writer primarily because he said that his middle school teachers were very tough and made him write a lot before enrolling in Wilson High School (Ramón, Interview 2).

Ramón lived in Mexico as a child, but his father died when he was eight years old. After his passing, the family moved in with the grandparents and eventually moved to the US. Ramón stated that he lived in a two story house near Wilson High School with his mother, stepfather, two brothers and a three year old sister. His grandparents also lived in the family home although in a separate area. He told me that he really didn't like his neighborhood because there were many "old people" there and that made it boring. He said that eventually he wanted to go back to Mexico because there were more things to do back home (Ramón, Interview 2).

In class Ramón was always loud and boisterous, so it was interesting that he said that he used to talk a lot, but now he was quiet (Ramón, Interview 2). He often struggled to stay on task because he was always talking with his other classmates. He was so friendly with everyone in class that many of those friends often sought his attention which he easily gave them even when he was supposed to be working on his assignments. I watched him many times when he was working on class assignments. When given some kind of class work to complete, he was generally the last one to get started. Before starting the assignment, he would pull out his phone, untangle his headphones and then place them perfectly in his ears, adjust and re-adjust them, all before starting his work. With his head phones in his ears, he would then look around the room to see what everyone else was doing before he began his work. He would spend so much time

getting ready to begin his work, that by the time he started the assignment, the bell was getting ready to ring, so he would then just stop. If the teachers announced that the assignment was due before the end of the class period, then he would quickly work on the assignment so that he could turn it in. Both girls on his PBL team often reeled him in when they saw he was often off task or that his lack of concentration could negatively affect their team. When the teachers assigned each team to re-write in their own words one of the scenes from *Romeo and Juliet*, Hadie quickly turned to Ramón to explain what they had to do since he had been absent the previous day. The assigned grade would be based on the team's collective effort, so if anyone could cause them to lose points, it would be Ramón. But GEO had mentioned to me that he felt Ramón was learning to harness in his excessive energy. Both GEO and ELA explained that they were very worried initially about whether or not Ramón could make it through the program. He struggled to pass his classes during the first semester, and they considered whether it would be best to remove him from the program (Teacher Interview, 4/12/17). If Ramón's grades were lower than his peers it was not because he did not understand the content material. When his team discussed new information, he generally always demonstrated that he had a good understanding of concepts presented. When the teachers introduced the new Mountain Vista Project, ELA informed the students that the teams needed to create an argument that would sway City Council to side with their research proposal. ELA asked the class what concepts they could draw from to make an impact on their argument. The students were silent for several seconds until Ramón shouted, "Ethos, Pathos, Logos!" (Field Notes, 2/27/17). ELA looked at Ramón and nodded with approval that Ramón not only made the connection of how to use ethos, pathos and logos, but that he was able to take a concept from a previous lesson and apply it to this

project. If his grades suffered it was only because he was too impatient to take the time to revise and edit his class work before turning it in.

One of the more interesting things about Ramón was that he was quite the salesman. One day as the students were preparing for a reading assignment, he came up to me and said that he had burritos in his backpack for sale. I immediately looked at his backpack, not sure what to expect. It looked like a normal backpack, so I wondered exactly how many burritos were in there. He said he was selling them for \$1 so I asked him what kind he was selling. Suddenly his salesman voice recited, *Tengo de todo. Verde, rojo, papas con queso, papas con chile, carne molida* “I have all kinds. Green, red, potato and cheese, potatoes and chili, ground beef” (Field Notes, 2/27/17). I think I was momentarily stunned at how comfortable he was in this sales transaction, but I nonetheless ordered two *chile rojo* burritos that I thoroughly enjoyed later that day. He mentioned to me that as soon as he would get home, he’d start the preparation for the burritos by chopping the potatoes and cooking the meat. By 5:45 in the morning, he and his mother would start wrapping the burritos to ready them for sale at school. This schedule was likely very difficult especially for Ramón’s mother whose job was to prepare food at a local restaurant as well.

I asked Ramón about his goals after high school. It didn’t seem that he was interested in going to college and that surprised me. He then stated that he felt college was a waste of time and money because his mother went to college to become a medical assistant but when she tried to find employment she was told that the certificate issued to her was not valid. It was unclear exactly what happened with Ramón’s mother, but it clearly impacted his goals after high school. Although his mother wanted him to go to college, he said that he preferred to work in an auto

body shop like some of his uncles who worked at local car dealerships. He passed all his state assessments as a freshmen, so he was on track to go the college route if he changed his mind.

The teachers both stated that Ramón had the potential to be a great student, but that he too often worked only for himself and not the good of the team. The format of WNT was based on students working collaboratively with teams, so the learning environment could force Ramón to work in an environment in which he was not comfortable. The teachers explained that often his salesmanship prioritized his actions at school. Both teachers understood that for Ramón his priority was above all to sell his products, then learn if necessary (Teacher interview, 4/12/17). I found it very interesting that although the students all had strikingly different personalities, they also shared several commonalities that they may not have realized that they shared.

The students all grew up and lived near Wilson High School with their families and extended families, and they were all involved in campus activities outside of NT. Although only Ángel and Hadie applied in their 8th grade to be part of WNT, all the students learned to enjoy working with other students on PBL units. Both Hadie and Ángel wanted to become doctors while Jessica talked about going into law enforcement and Ramón wanted to join his uncles and work in an auto body shop. Together these students were able to negotiate past their differences and work collaboratively to complete some very challenging PBL projects. The Table 3.2 below provides a summary of each of the focal students.

Table 3.2: Summary of student characteristics

Students	Characteristics
Hadie	<ul style="list-style-type: none"> • Fluent in English and Spanish with Spanish as her primary language. • Hadie earned good grades and she stated that she read efficiently in both English and Spanish. • Submitted her application to WNT during her 8th grade year. • Initially prioritized being with her friends, but learned to focus on her academics as the year progressed. • A member of the school mariachi group. • Has always lived in the Wilson area with her grandparents, and was able to see her parents, and was the oldest of five children. • She aspired to be a doctor.
Jessica	<ul style="list-style-type: none"> • Fluent in English and Spanish with Spanish as her primary language. Although she says she was most comfortable speaking, reading and writing in English, she generally always spoke in Spanish. • Naturally very shy but always committed to her studies as she was preparing for dual credit courses. • Did not apply to become part of WNT. Discovered she was in the program on the first day of school. • She admitted that she was so shy she struggled to present to her peers, but over time she learned to seek help from her teachers and gained confidence to present her projects. • A member of the volleyball team. • Recently moved into renovated apartment complex near Wilson High School. • She aspired to become a police officer.
Ángel	<ul style="list-style-type: none"> • Ángel almost always spoke using Standard Spanish, although he demonstrated effective reading and writing in English. • Coded as LEP • Submitted his application to WNT during his 8th grade year • Shy and soft spoken and often did not seek leadership roles, but accepted a leadership role to support his team. • A member of the school's soccer team • Lived near Wilson High School with his parents, brother and two younger sisters. • He aspired to become a doctor.
Ramón	<ul style="list-style-type: none"> • Ramón was fluent in English and Spanish with Spanish as his dominant language. He used Spanish to demonstrate solidarity with his peers and used English to demonstrate academic learning.

	<ul style="list-style-type: none"> • His father died when he was young, and currently lived near Wilson High School with his grand-parents mother, step-father, brother and two sisters. • Ramón discovered on the first day of school that he had been placed in the WNT program. • His priority was focused on his burritos sales. Although he struggled at times to stay on task, he eventually demonstrated that he could prioritize the needs of his team. • A member of the school's NJROTC program, former soccer player, and now a member of a band that practiced after school. • His goal was to work in an auto body shop.
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Interviews

Semi-structured ethnographic interviews.

Kaplain-Weinger and Ullman (2015) argued that conducting interviews along with participant observation was a critical aspect in getting to know and understand the participants of a study. The ethnographic interview is not a formal interrogation (Frank, 1999), but it is instead a conversational tool that the ethnographer uses to learn more about the study participants an effort to better understand their motives and point of view. My role as participant observer provided an opportunity for me to develop rapport with the students and possibly minimize, in their eyes, my role as a formal researcher. In order to gain the students' perspective regarding their language and literacy practices and their role in WNT, I used ethnographic interviews with the four focal students as needed as a follow up to the various literacy events in which they participated. The interviews provided first hand student reflections on how the language and literacy practices led to either project success or continued levels of frustration. The purpose of using the ethnographic semi-structured interview was to “gather descriptive data in the subjects' own words” so that I could develop insights on how the ELLs interpreted the connection between their oral and written interactions to their use of language and literacy within what

developed as the figured world of the Wilson New Tech learning environment (Bogdan & Biklen, 1992, p. 96). Establishing trust with the students helped them feel more at ease when answering questions from the ethnographic interview that I used throughout the study to understand the connection between oral and written interaction and the use of language and literacy of the ELLs enrolled in the Wilson New Tech program

The data collected from the participant observations and documented in the descriptive field notes was the basis for the semi-structured interview questions posed to the students. Semi-structured guiding questions were used in an effort to address the research questions to better understand the role that oral and written interactions played in connection to the use of language and literacy practices of focal students. Follow up questions were used to further probe for information regarding how students engaged in oral and written interactions that may have connected to their language and literacy practices. The guiding questions also helped provide a clearer understanding to how the theoretical foundations of SCT and the evolving theory of figured worlds factored in student engagement and oral and written interactions as the ELLs used their language and literacy practices to solve their PBL tasks.

The main participants of the ethnographic interviews were the four focal students. The focal students, however, often worked with other student teams within WNT, so I also interviewed other students to gain a holistic perspective of how the oral and written interactions used within their PBL were connected to the use of language and literacy. The data collected from the ethnographic interview was used in part to triangulate data from other sources such as participant observations, artifact collections and audio/video recordings of student activities. The ethnographic semi-structured interviews were exploratory in nature (Frank, 1999; Merriam, 1998) and used to gather insight on how the ELLs perceived their connection between how they

used their literacies and negotiated meaning to their PBL research tasks. A list of guiding questions for the ethnographic interviews is included in Appendix A, Summary for Research Design and Data Collection Tools.

In addition to the ethnographic interviews of the students, I also used this tool when the WNT administrator, Ms. Smith, entered the classroom. With her busy schedule, it was difficult to schedule time for an in-depth interview, so whenever she would come into class I would take advantage of the time and ask her specific questions about the use of language and literacy within WNT. Her perspective was important because she understood that the English language proficiency of her students did not correlate to their ability to learn. As the school had previously been in academic trouble, Ms. Smith was very focused on ensuring that students were provided with opportunities to practice their language and literacy in an academic learning environment that could lead to improving their scores on the state exam. Ms. Smith shared with me preliminary benchmark data that was used as a preview to the state exam, and she was very pleased that the benchmark scores were already twice what they scored in the beginning of the year benchmark. Ethnographic interviews were also used on a regular basis with the teachers to better understand why they designed assignments or tasks the way they did and to understand what they expected from the students based on their previous learning. As students worked on various PBL projects, I often spoke to the teachers about the assignments and used ethnographic interviews with the teachers to better understand the intent of the assignment.

Semi-structured in-depth interviews.

I followed up the teacher ethnographic interviews with a more in-depth three hour semi-structured interview (see Appendix B for interview protocol). I scheduled the teacher interview after school so that the teachers would not have the usual interruptions of a typical school day.

The rationale for the interview was to gain a better understand of each of the focal students' academic backgrounds and to connect their history to how they used their language and literacy to make meaning. Along the same lines, in the interviews I was also able to ask the teachers about their perspective on how the language and literacy practices of the students was continuing to change and evolve. The teachers also provided important reflections on what they perceived as student growth with each of the focal students and what they observed were obstacles that the students needed to overcome to reach their potential as learners. The interview with the teachers provided some very poignant comments from ELA as both he and GEO recognized the transformation that they were witnessing in the students, primarily in Ramón, who sacrificed his vacation in order to support his team during their presentation. Through the teacher interview, the idea of a figured world became prominent and was followed up with ethnographic interviews of the students, semi-structured focus group interviews and more in-depth interviews of each of the students.

I scheduled two in-depth interviews with the students where I was able to talk with them individually. The rationale for the in-depth student interviews was to discuss with the students directly about the role that language and literacy played in their PBL research. The students were able to discuss how their oral and written interactions contributed (or not) to the completion of their PBL projects. The first interview was conducted at the culmination of the Mountain Vista PBL unit. The lesson was lengthy and challenging, so I was interested to hear about their perspective on how working with a team shaped the language and literacy tasks required of the project. With the help of Ms. Smith, the first round of interviews were scheduled during the campus finals schedule. Since the Mountain Vista presentation functioned as their “final” it was an ideal time to meet with the students. (See Appendix C for Interview 1 protocol). Ms. Smith

issued passes to the students to have them report to the classroom in Building A that functioned as her office, so the students were very familiar with the environment. The interviews were audio and video recorded to facilitate transcription. The second interview was scheduled at the culmination of the school year, but because of the various end of year activities, it was difficult to meet with the students. I scheduled the second interview in September 2017 as the new school year started. Over the summer, Ms. Smith was offered another position in a different city and consequently was no longer my point of contact. The second round of interviews were scheduled by the new WNT administrator, Ms. Gonzalez, who had worked successfully at two previous New Tech schools in the district. The interviews were held in her office and the students were again all given passes to report to the office for an individual interview. The interviews focused on reflecting on the various language and literacy tasks that they completed the previous year and how they felt now as the sophomore group of the program. (See Appendix D for Interview 2 protocol).

Student focus group.

Ideally a 5 – 15 member focus group can lead to an engaging discussion that can shed light on various previously observed events (Babbie, 2014), so I was interested in selecting four other students in addition to the four focal students for a total of eight focus group participants. The rationale for including four additional students to the focus group interview was to gain a broader perspective about the how the students understood PBL as an instructional tool. Because I had been closely following the four focal students throughout the study, I observed and documented how they used their language and literacy practices to complete their PBL tasks. Including the four additional students to the focus group created an engaging discussion that emphasized the solidarity shared among all the students regarding their membership within the

figured world of WNT. As I observed the focal students working with each other and with other classmates, I also took note of the other four students (Melanie, Alice, Anuel, Walter) in the class who were actively engaged with the focal students as they worked on their projects. When I organized the focus group discussion, I included the four focal students along with Melanie, Alice, Anuel and Walter. As I came to know these other students, I asked them informal questions during class about the challenges they faced as they worked on their projects. Because the theory of figured worlds was becoming more prominent, I wanted to ask the students more about how their PBL assignments which included extensive reading and writing were typical of the work of WNT. At the culmination of the final unit, I scheduled a focus group discussion that was held on a day when the school was on a modified testing schedule for the end of year final exams. Because the WNT finals were all performance projects, this was an ideal time to meet with the focal group. With the help of Ms. Smith, the WNT administrator, we were able to schedule the focus group interview to include the focal students and four other selected students who were all ELLs in the WNT class. The focus group interview lasted approximately two hours and was conducted in the classroom in Building A that functioned as Ms. Smith's office. Because the discussion with a group can become lively with several members speaking simultaneously, the focus group interview was audio and video recorded to facilitate the transcription and data analysis.

A grand tour question is a way to have the participants provide a descriptive account of what they do (McCurdy, Spradley, & Shandy, 2004). The focus group discussion started with some grand tour questions where the students were asked to describe how they experienced their PBL research project and to describe their experiences in interacting with their PBL team members. To follow up on information presented from the grand tour questions, the focus group

discussion also included mini tour questions (McCurdy et al., 2004) where the participants were able to reflect, describe and explain specific aspects of the procedures involved in the oral and written interactions in which they engaged that were connected to their use of language and literacy (see Appendix E for focus group interview protocol). The rationale for using a focus group discussion was to provide the students not only with an opportunity to express their opinion and perspective regarding their New Tech projects, but to give them a venue to openly discuss what they perceived were the connections between their projects and how they used their oral and written literacy practices to complete their projects. When asked about working on projects with a team of students, one student, Melanie readily reflected on the expectation established within WNT regarding their collaborative learning (Focus group interview, 5/31/17). “[W]hen someone asks us what is NT, we don't just say, ‘oh we work in groups’ because it's way more than that (Focus group interview, 5/31/17). Anuel also confirmed the sentiment expressed by Melanie regarding the challenges they faced working in teams. “It's because we were so used to working by ourselves (Ángel nods in agreement) that we couldn't handle bad kids or good kids. We didn't know how to collaborate (Focus group interview, 5/31/17). The students were able to express during the focus group that they felt frustrated by being forced to work with other to complete their PBL tasks. The students may have harbored these sentiments from the onset of the school year, the focus group discussion provided them with an opportunity to express what they perceived were challenges to completing their projects.

What was unexpected during the focus group discussion was a clear sense of solidarity as members of WNT. The students had alluded to differences between their classroom and classrooms outside of WNT, but the discussion of the focus group clearly indicated that they were perceived differently from friends outside of WNT but more importantly, they felt that they

were different from their friends because the level of work they were doing was different as well. The data collected from the focus group discussion helped me see that the students felt that the work they were doing in the WNT classroom was a reflection of the membership or figured world of WNT. Although I recognized that the projects the students were doing were a departure from the traditional instruction, it was not until the focus group discussion that the students openly acknowledged that they felt a sense of unity with their WNT peers. Through the dynamics of a focus group discussion, it would not be unusual for topics to emerge that may not have been evident through participant observation or even through interviews (Babbie, 2014). Through the focus group discussion, the students were able to openly express that they felt they were different from the general population of students because the work they were doing in their classroom was different from what other students were doing. Ramón summarized the differences between WNT and the general population by comparing that in the other classroom the students were in rows completing pen and paper assignments, but in WNT the students were sitting at tables, in groups (Field notes, 4/7/17) because their collaboration was required in order to complete group projects. The focus group discussion further validated the feelings among the students as they realized that their learning environment was different from the traditional classroom.

Participant Observation

Conducting participant observations allowed me as an ethnographer to truly understand how the oral and written interactions of ELLs were connected to the way they used language and literacy in their New Tech classroom. Through participant observation, an ethnographer could collect data from naturally occurring participant behavior that may later indicate significant “patterns or co-occurrences” (p. 40) that could be evident within the context of the study (Heath

& Street, 2008). The data collected from participant observations provided the main data sources to address how the activity within the Wilson New Tech classroom shaped the academic language and literacy use of ELLs. The rationale for using participant observations to address the over-arching research questions was to be able to understand and capture descriptive first-person accounts of naturally occurring behavior (Kaplan-Weinger & Ullman, 2015). By observing the students in action, I was able to see how and under what conditions the students used their language and literacy practices in oral and written interactions to solve their PBL research problems. By collecting data through participant observation, I was also able to address the sub-questions of this study to see how their language and literacy practices may have changed over time and how the learning environment functioned as an artifact that connected their literacy practices to the figured world of WNT.

As a participant observer among the students, I was able to learn directly from the students about how their interactions were connected to their use of language and literacy. The collected data from the participant observation were used in discourse analysis to further understand how the students used their language and literacy in meaning making and negotiation as they worked to solve their PBL assignments. The use of participant observation also provided me with an opportunity to see how the oral and written interactions of the focal students within the Wilson New Tech program contributed to the shared repertoire that became evident with the figured world of WNT.

The participant observations were documented using descriptive field notes that focused on the participants' oral and written interactions connected to their language and literacy use that illustrated how the students negotiated and found meaning in the day to day activity in their PBL classroom (Emerson et al., 2011). The focus of the participant observation included

describing the physical learning environment that may have contributed to how students mediated tools to facilitate their learning within their classroom environment. The observations also focused on the descriptions of the students' activity and interaction within the classroom, descriptions of the oral and written interactions between the students and teachers regarding how they used their language and literacy, descriptions of how the students used language and literacy to complete learning tasks and descriptions of materials or artifacts used or created by the students during oral and written interactions to facilitate meaning making. Classroom observations provided me with an opportunity to observe under what conditions the students used language and literacy to solve their PBL research problem as they became more competent with the material they were learning.

Participant observation data was collected in the "field" which included the classroom as well as additional sites that functioned as learning environments within the context of the school such as the patio or cafeteria where the focal students were working on their projects (Lichtman, 2013). I observed the students at least three times a week and sometimes more as the projects started to intensify during 22 weeks of the spring semester for a total of 72 observation hours. In order to organize the data as it pertained to each of the research questions, all observations were documented on a case study database to indicate date and content of the observation. This database provided an organized and systematic way to view the dates and content of the observations.

Artifact Collection

In order to enhance my understanding of how the oral and written interactions of the students shaped how they used language and literacy and to triangulate my findings from other sources, artifacts that focused on language and literacy texts were collected and analyzed to

identify themes or trends. Merriam (1997) argued that document analysis was a valuable data collection method due to the fact that documents were generally very accessible and stable data sources that were unaltered by the presence of the researcher. The rationale for collecting artifacts was that such data would provide more concrete information that could be used in the data analysis to illustrate how student oral and written interactions were connected to the use of academic language and literacy as students complete their PBL project.

Various examples of student writing were collected that addressed the research questions that illustrated a connection between the PBL projects and how the students used their oral and written interactions to solve their PBL tasks. The examples of collected artifacts were both in progress and finished examples of academic writing and content area literacy that the students used or created as part of their PBL projects. Any artifacts that illustrated evidence of student language and literacy that were used or shown during public presentations such as student generated posters, presentations or other visual displays of learning were also collected. The examples of student work that addressed the research question that illustrated how the oral and written interactions with the PBL classroom shaped academic language and student literacy practices were collected as artifacts. Additionally, the artifact collection addressed the sub-questions by illustrating how the student use of language and literacy change over time and how their examples of language and literacy identified them as members of WNT. Collected artifacts were photographed and uploaded into NVIVO for coding and analyzed in an effort to identify emergent themes and common trends as they pertained to student language and literacy. Visible names on collected artifacts were redacted.

Audio/video/other media

Various classroom activities were audio recorded and paired with a video recording to facilitate transcription. Activities that were recorded included students working collaboratively on their PBL tasks in the classroom or in other instructional settings such as the patio or cafeteria. Student presentations in class and outside of class were also audio/video recorded. The rationale for using an audio recording was to provide an additional level of information in order to generate “full and accurate” (Babbie, 2014, p. 331) account of the collected data in the students’ voice. The audio recordings provided evidence of speech inflection that was paired with the information collected from the descriptive field notes. Audio recorded evidence greatly enhanced the content of information provided by the participants. All video recording were used only to aid in transcription.

The district and classroom teachers also used Facebook and Twitter as social media that showed the efforts of the students throughout the school year. I followed WNT on these social media platforms to capture not only academic literacy events but to document the socially mediated components that contributed to the students’ sense of belonging. The photographs posted on both platforms reflected positive student engagement throughout the year including the celebration of successful state assessment scores. Various social media pages were uploaded on NVIVO Capture and were coded and analyzed to identify patterns or trends.

Data Analysis

The goal of data analysis is to communicate understanding based on the information that has been collected from the data sources (Merriam, 1998). In this study, information was collected from various data sources in an effort to understand how the oral and written

interactions within a PBL environment were connected to the language and literacy practices of ELLs who were members of the Wilson New Tech program. Classroom observations, semi structured ethnographic interviews, in-depth interviews, focus group discussions, audio/video recordings of classroom activities and artifact collections provided information that was analyzed using discourse analysis to identify prominent themes and insight into how the oral and written interactions of the students shaped their language and literacy practices as they made meaning and negotiated understanding. All collected forms of data were organized by chronology and categorized in the case study data base for the data analysis phase. The data was continuously revisited, reorganized, reviewed and analyzed as data sources were added to the study that identified or connected prominent themes or trends pertinent how the students used language and literacy to solve their PBL assignments.

Memos.

As I researched information regarding translanguaging, code-switching and discourse analysis, I documented my findings in the form of analytical memos. I started to collect archival data in the fall 2016 before the official start of field component of the study. Information was continuously published in the local newspaper and on the news stations regarding the controversy surrounding the scandal associated with the district's state accountability rating. Despite local media focusing on the district's accountability scandal, Wilson High School continued to move forward in preparation for the implementation of their New Tech program. Principal Jones was quoted as saying that "success breeds success," and he felt that positive energy was on the horizon for Wilson High School with the implementation of New Tech. I wrote memos about every newspaper article related to Borderland ISD and later triangulated and analyzed those themes with the sentiments expressed by the students of Wilson High School.

With a new interim principal in place, I wrote memos to document the reflections of the students and teachers. The district stated that they shifted administrators to ensure that each school was staffed with the right administrators to lead the school to success on the state exam later that spring. I wrote conceptual memos on a weekly basis throughout the study to summarize events, identify problems, setbacks or developing themes (Heath & Street, 2008). I also wrote various memos to help me clarify concepts such as the specific components of TELPAS writing prompts that the students were completing or to just reflect on certain events such as the WNT Film Festival. Heath and Street (2008) state that memos can be used to connect ideas evident in the data to existing theories. Because the conceptual memos provided reflections on developing themes or patterns, they were essentially the first form of data analysis. Identifying problems or setbacks helped me identify areas that needed further research or follow up with the students or teachers.

Open coding.

My first day as a participant observer was February 13, 2017. I decided that I needed to simply observe the classroom environment for several days to understand the dynamics of the WNT learning environment. The nature of an ethnographic approach is inductive as the researcher does not enter the research site to prove a hypothesis. With an inductive ethnographic approach, the researcher is observing a culture in order to understand their experiences and patterns of the members. I wrote field notes every day where I documented what I observed along with my reflections of those observations. Every night I reviewed my field notes and then transcribed them in narrative form. The narratives allowed me to see how the collected data was starting to tell the story of the students of WNT. Once I finished data collection, with NVIVO 11 I started the process of “open coding” using both my field notes and the written narratives.

Braun & Clarke (2006) state that the use of the inductive approach can provide a multitude of codes that can be analyzed to identify various perspectives of the research questions. I read through all the collected data line by line to assign as many codes as possible (Emerson et al., 2011). Open coding produced 48 codes many of which were very general such as “demonstrating comprehension,” “academic writing,” and “identity.” Emerson et al. (2011) recommended that the ethnographer use the process of open coding to answer specific questions such as what are the students doing, how are they were doing it, what is happening and what does it mean? I analyzed the data line by line a second time focusing on what the students were doing and how they were doing it. With the second read, more specific codes were added that clarified some of the more general codes initially developed. After reading the data a second time with a focus on what the students were doing and how they were doing it, I created parent codes for the three main units *Romeo and Juliet*, the Mountain Vista Project and *The Odyssey*. For each unit I added the code “demonstrating comprehension” because within each unit the students were demonstrating comprehension differently based on the assigned lesson. Also with a second read, I realized that there were many forms of “academic writing” to include writing for state accountability, writing a script for a presentation or writing the dialogue for a play. So the second pass of open coding allowed me to add specificity to some of the codes that were too general.

Focused coding.

I reviewed the initial codes that were developed during open coding to either combine similar codes or remove codes that were redundant. Codes emerged regarding how the students used their language and literacy practices, so I applied Gee’s approach to discourse analysis (2012) because his work demonstrated how thematic connections were closely aligned to the use

of discourse. Using discourse analysis helped me identify more specifically how the students their own discourse to negotiate understanding and demonstrate oral and written comprehension of new information. Gee argued that Discourse (capital D) was comprised of five connected systems of language to include prosody, cohesion, discourse organization, contextualization signals and thematic organization (Gee, 2012). The initial codes that I developed were very general, so now with a more specific approach, I wanted to review the data to see how the students' interactions reflected Gee's five systems of language in their oral and written interactions. Charmaz (2006) states that after evaluating the initial codes developed during open coding, the researcher can then create a more focused approach to analysis. I analyzed the collected data to see how the students were using Gee's five systems of language to solve their PBL tasks. Through focused coding, not all components of Gee's system of language were evident in the students' work. Gee (2012) argued that prosody, cohesion and discourse organization were interrelated and those three systems support contextualization signals and thematic organization within the Discourse. I decided to read through the data yet again this time focusing on how the students used contextualization signals and thematic organization to demonstrate comprehension and meaning making. Of the five language systems, the students often used contextualization signals to ensure comprehension and their Discourse and writing was often organized thematically to demonstrate their meaning making.

At this time I started to read Zentella's study, *Growing up Bilingual* (1997). As she described how the participants in her study used In the Head, Out of Mouth and On the Spot linguistic exchanges, I realized that the participants in my study had also used similar languaging interactions. I read through the collected data once again using a focused coding approach to identify when and how the WNT students used Zentella's linguistic exchanges. I discovered that

they often used such languaging interactions to communicate with each other and express meaning. I created spread sheets to keep track of the various linguistic exchanges used by the students to identify thematic connections in how they used these languaging practices. Once I completed the focus coding by using Zentella's linguistic exchanges, I then triangulated the collected data with the interview data to identify thematic trends or patterns to use as a theoretical framework in the analysis of the students' discourse.

Through focused coding, another theme emerged that I had not anticipated and that was the theory of Figured Worlds. Holland, Lachiocotte, Skinner and Cain (1998) defined figured worlds as cultural "realm[s] of interpretation in which a particular set of characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others" (p. 52). The figured world is created based on the activities, procedures, discourses or artifacts that are shared among its members (Holland et al., 1998). As I used discourse analysis to review how the students were using their language and literacy practices, I discovered that one of the recurring themes was that the students had a sense of belonging or sense of identity as members of WNT. Through participant observations, I noticed that the actions and languaging practices of the students identified them as members of WNT. Their discourse often reflected their connections to their peers, but at the same time, they often expressed how they were different from the general student population. Gee argued that concepts of "status and solidarity" (2012, p. 113) could be evident within all Discourses and although they were somewhat polarized, these notions were often presented together. I used focused coding to analyze the data to see how the concepts of status and solidarity were connected to the theory of figured worlds. I discovered that the students' oral and written interactions showed several examples of either status and/or solidarity. The data showed that there were times when the

students elevated themselves in one way or another through their writing or through their actions, and more prominently, the students demonstrated a sense of solidarity through their language and literacy practices that aligned them with their peers of WNT. Below, Tables 3.3 and 3.4 illustrate examples of students' language and literacy practices where they demonstrated status and solidarity in connection to the theory of figured world.

Table 3.3: Demonstrating Status

Status in connection to the figured world of WNT		
Students	Demonstrating Status	Context
Hadie	The script was very true to the story, and Alexia was reading it before going outside for the filming. As she'd read a section, she'd go show it to the person who would be reading that part with a directive, "Make sure you know this!" The students willingly obliged and practiced their reading as directed (Field Notes, 5/18/17)	As co-director in the Odyssey project projected a sense of power to ensure that students were ready for the filming of the play.
Jessica	Jessica was recognized [by the teachers] for the fact that despite incredible challenges, she persevered (Week 16 memo).	Jessica struggled with some of the projects, but she was ultimately recognized at the end of the year by the teachers for her dedicated work ethic.
Ángel	Ángel showed me the graphic organizer and clearly and carefully explained to the girls what they need to do (Field notes, 3/1/17).	Usually quiet and reserved, Ángel was given the task of leading his team to create a graphic organizer.
Ramón	He asked the team to revisit the basketball activity because they may not have enough time, and it may have shown a loss if they missed the basket. Ramón quickly	As his team was questioning what to include in their presentation, Ramón made a decision that he felt would be best for his team.

	decided, “We’re not doing the basketball thing” (Field notes, 3/8/17).	
ELA, GEO	“Today is about starting to shape your presentation. The big draw about WNT is that we are not a traditional classroom...” (Field notes, 3/6/17).	The teachers often expressed to the students that what they were doing was different than what other students were doing.

Table 3.4: Demonstrating Solidarity

Solidarity in connection to the figured world of WNT		
Students	Demonstrating Solidarity	Context
Hadie	Hattie: Well, we've all started as Spanish speakers (Focus group interview 5/31/17).	During the filming of The Odyssey, one of the girls struggled to say the word <i>massacre</i> . The students quickly changed the script to help her. I asked Hadie to reflect on this moment.
Jessica	Jessica: <i>Ángel, ¿si sabes dónde vamos?</i> (“Ángel, do you know where we are?”) (Field notes, 3/1/17)	As the students were reading, Jessica looked over to Ángel to make sure that he was reading the same section as the team.
Ángel	NP: Did you like working with the team? Would it have been easier to work by yourself? <i>Ángel: No, es mejor en equipo.</i> (“No, it’s better as a team”) NP: <i>¿Por qué?</i> (“Why?”) <i>Ángel: Porque ellos son muy trabajadores y me ayudaron en algo e hicieron muy buen trabajo</i> (“Because they are hard workers and they helped	Ángel explains that he felt it was better to work with a team instead of individually because the students help each other.

	me a lot and they did a good job.”) (Ángel, Interview 1).	
Ramón	<p>Jessica: <i>¿Cuales otros rules?</i> (“What other rules?”)</p> <p>Ángel: <i>Otras dos.</i> (“Two more”)</p> <p>Jessica: <i>No estar vendiendo.</i> (“No selling”)</p> <p>Ramón: <i>Nah, nah nah no eso no es</i> I don’t agree, do you agree sir?</p> <p>Ángel: <i>¿En cuales?</i> (“With what?”) (Field notes, 2/27/17).</p>	The team was negotiating project rules and Jessica suggests to Ramón that he cannot sell burritos in class. Ramón quickly challenges this by trying to get Ángel to align with him.
ELA, GEO	ELA tells students to “fold your papers – burrito style, then hamburger... Wait, let me keep culture... first burrito style, then torta style – whatever cultural preference you want” (Field notes, 2/16/17).	These were simple directives from the teachers about folding their paper for an assignment. The teachers could have directed the students to fold their papers lengthwise, but by describing the fold as burrito style then torta or sandwich style, they made the students giggle but also ensured understanding.

Connecting Research Questions to Data Sources

My research questions focused on investigating how the oral and written interactions within a PBL classroom were connected to the use of academic language and literacy practices of ELLs in the Wilson New Tech Program. The data collection methods addressed the study’s purpose through examination of the research questions by using qualitative tools such as participant observations, ethnographic semi-structured interviews of the students, focus group

discussion, artifact collections to include audio/video recording of classroom activities. I connected the research questions to the data sources to create guiding questions to be used during data analysis (see Appendix A for summary of research design and data collection tools).

Ethical Considerations

Every effort was made to protect the identity of the study participants. Although there were some risks in exposing identity, the risks were minimal. Pseudonyms were used for all the participants including the school, district and region where the study was conducted. All participants had the opportunity to opt out of the study. None of the study participants received monetary compensation, although there were always cookies for them during the interviews. Participation in the study did not affect student grades. A transcriptionist was hired to transcribe all audio/video recordings and also signed consent to maintain confidentiality of transcription materials.

Trustworthiness and Positionality

Qualitative studies must account for validity and trustworthiness throughout the course of the study. Merriam (1998) argued that a researcher could use multiple strategies to enhance internal validity of a study. In this study, triangulation of data, member checks, long term observations, peer examination of the data along with researcher reflexivity were strategies used to ensure trustworthiness of the study. Throughout this study, multiple artifacts were collected to triangulate the findings from various sources. Participants were asked for verbal approval prior to completing any activity and participated in member checks to ensure accuracy of collected data. To increase the validity of the findings, I acted as a participant observer during most of the spring 2017 semester documenting 72 observation hours. Throughout the study, I shared

collected data primarily with my dissertation chair as well as with other doctoral students for valuable insights that led to a different perspective on the themes that were emerging.

As a researcher, I was aware that I held certain assumptions and biases associated with my positionality as a former principal and as an ELL myself. The process of continuously reflecting on my own biases allowed me to understand that what I was observing and understanding was through the lens of my own life experiences (Kaplan-Weinger & Ullman, 2015). The process of reflexivity became a critical component during the data analysis. After reading through my field notes countless number of times, I realized that some of the biases and preconceived ideas that I held were actually preventing me from seeing a more global view of the students' language and literacy practices. *Growing up Bilingual* (1997), helped me set aside any preconceived notions that I may have held about languaging practices because I saw how effortlessly Zentella was able to apply the use of languaging interactions to the participants in her study. At that point, I turned to my field notes once again and was able to identify the languaging interactions that Zentella identified in her study and applied them to what I observed in WNT.

Kaplan-Weinger and Ullman (2015) argued that in order to be able to make sense of the collected data in a study, an ethnographer must be able to understand how the participants of the study make sense of their surrounding environment. By evaluating my own sense of reflexivity, I was able to better understand the motives and intents of the focal students in my study. As an educator with over 30 years' experience, I was already very familiar with the typical high school learning environment. The first 10 years of my career were spent teaching high school English, and the remainder of my career was administrative before I retired as a high school principal. So through this lens, I documented what I observed taking note of how students were making sense

of what they were learning and how they were using their language practices to demonstrate understanding. Visiting a classroom was very commonplace for me since I had done it so often as a high school principal, but my role was now that of an ethnographer and not a campus administrator. The task of the ethnographer is not to judge the familiar like a high school principal, but to observe what they see, hence make the “familiar strange” (Heath & Street, 2008). Because it had been over 20 years since I last worked as a classroom teacher, I was anxious to know how much the instructional environment had change and for that reason the familiar was already somewhat unfamiliar.

As an English Learner growing up in an area of town that was also considered economically disadvantaged, I actually shared many commonalities with the students of Wilson High School. I wanted to gain their trust and confidence hoping that they could relate to me as someone similar to them rather than view me as a former high school principal. Drawing on the postmodern scholar Foucault, my position as a former high school principal established my positionality as one of power and privilege over the students and even over the teachers, so my goal was to demonstrate that I was not there to judge them or worse discipline them. Although I shared with the entire class how I had grown up in an area of town much like theirs, they didn’t immediately demonstrate trust and confidence and for the most part kept their distance until they got to know me better. As I sat with the students almost every day, they realized that I was not there to judge them, and we eventually reached the point where they started to talk to me in confidence about school, their teachers or outside activities that they were involved in. After *The Odyssey* project, the student team that I followed wanted to take a group picture. I watched the students exit the classroom excitedly with the photographer to prepare for their photo opportunity. While they were taking their picture, I decided to take advantage of the quiet time

to start reviewing my field notes when suddenly one of the girls came back to invite me to join them for the photo. At that moment I realized that I was no longer the outsider but had transitioned to become an insider where I finally gained the trust and confidence of the students and of the teachers.

Summary

An ethnographic case study was conducted at Wilson High School with the 9th graders enrolled in the Wilson New Tech program as the focal students. An ethnographic case study was an appropriate approach to discover how the oral and written interactions within a PBL learning environment were connected to the use of language and literacy for the ELLs in the Wilson New Tech program. The Wilson New Tech program was aligned to the New Tech Network where the focus was on providing an interdisciplinary approach to learning with an emphasis on PBL. Qualitative tools such as classroom observations, semi-structured ethnographic interviews, focus group discussions, the collection of artifacts and data from audio/video recordings helped me to better understand the connection between oral and written student interactions and their use of academic language and literacy in the Wilson New Tech program. The collected data was analyzed using discourse analysis using both open and focused coding (Emerson et al., 2011) to triangulate collected data to identify common themes and trends that may emerge that may help address the research question. The identified themes inform current research on the connection between PBL to the use of academic language use for ELLs. The next chapter provides a chronology of the PBL units that the students completed throughout this study. The next chapter will address the first two research sub-questions by identifying what language and literacy practices were used by the students and how they may have changed over the course of the semester. Aligned to the language and literacy practices of the students, I will also address

the second research sub-question by specifically showing what oral and written interactions were used by the students to solve their PBL tasks.

Chapter 4: Oral and Written Language and Literacy Practices

This chapter provides a chronology of the three units the students completed during the spring semester based on participant observations. The purpose of this chapter is to demonstrate how the students of WNT used their oral and written interactions to negotiate meaning as they completed their PBL tasks. More specifically, this chapter will illustrate how the students used their various language interactions to demonstrate intent as they communicated with their PBL team members. I will show that the students used various code-switches or translanguaging practices both informally and formally to express content knowledge within an academic setting. This chapter will also show the various types of writing completed by the students to satisfy accountability writing i.e., TELPAS writing and STAAR preparation, in addition to the technical and creative authoring that the students completed for their PBL projects. I will present information that showing how the students of WNT engaged in a literacy rich learning environment where they were exposed to various modes of writing that strengthened their written literacy practices. Following the chronology, I will show specific examples from the three units of how the focal students used the oral and/or written interactions to solve their PBL problems and how their language and literacy changed over time.

There are many approaches to studying how students learn to use language and literacy to communicate with others. Within a PBL classroom setting, the most significant factor to student learning is that the students work collaboratively to solve their PBL task using a variety of literacy practices. Within the WNT classroom, the students worked in teams to complete their various projects. Applying a sociocultural perspective to how students used their language and literacy practices allowed me to better understand how they communicated with each other. The WNT classroom setting was structured to facilitate team work as desks were now replaced with

tables to accommodate a four member team. The WNT classroom that was once two classrooms lined with rows of student desks was now retrofitted into one large learning space filled with tables around the room so that students could work as student teams rather than individually. Gee argued that people are their environment, and our ideas and values come from our lived experiences. Those lived experiences include literacy practices and not necessarily literacy skills (Perry, 2012) that shape who we are and what we do. The literacy practices evident within the WNT classroom represented the social practices of the students as they engaged with others to communicate assignment details, tasks and emotions.

Romeo and Juliet

My first day as a researcher was the day before Valentine's Day, and it very fittingly coincided with the beginning of a two week unit on *Romeo and Juliet* (R&J). Because I initially just wanted to observe the dynamics of the classroom instruction, I decided to sit at an empty table on one end of the classroom near ELA's desk where I could see the entire classroom. As I settled in, ELA came up to me and explained that for now the unit that the students would be doing would be "ELA heavy" (Field notes, 2/13/17). He didn't explain further what this meant, but I only assumed that the unit would not include geography objectives. According to the Texas Essential Knowledge and Skills, all students in English I were to read "Literary texts/Drama" to understand how to make inferences and draw conclusions from the text (English Language Arts and Reading, English I, 2009-2010). The unit on R&J was meant to satisfy this objective and would introduce the students to not only Shakespearean language but Shakespearean storytelling.

During this two week unit, the students read *Colours of Love: An Exploration of the Ways of Loving* (Lee, 1973) (see Appendix F for *Colours of Love*) as a way to learn about the

various types of love. The students also read anonymous love biographies written by their teachers, then they wrote their own anonymous love biographies as part of the WNT Valentine's celebration. As the students read the play, they also completed a variety of oral and written activities that were intended to have them demonstrate content understanding based on their reading of the play.

The R&J projects allowed the students to work collaboratively and engaged them in various role playing tasks, but the R&J unit did not contain the typical characteristics of a PBL unit. While the students worked in teams throughout the unit, there was no driving question guiding the instruction, nor were the students working to solve a problem or task. The format of the teacher led instruction seemed to follow the traditional initiate-response-evaluate teaching model (Walsh & Sattes, 2016). The students, however, participated in various oral presentations that were nonetheless designed to engage them to work with their peers to demonstrate understanding of the play's plot. For example, after reading Act I, the student teams were each assigned a specific scene where they were to create a tableau using themselves as motionless figures depicting the action of their assigned scene. In creating their tableau they could use any artifacts within their classroom that would help tell the story of their scene. The students laughed out loud as they practiced acting like statues for their tableau so they could be ready to have their picture taken by ELA for the class PowerPoint. After their pictures were taken, ELA then explained to the students that the PowerPoint would show one tableau at a time and the students write what was happening in the scene then arrange the tableaus in chronological order. Every slide was followed by peals of laughter from the students then followed by collaborative whispers as the students discussed the order of the tableaus. The activity kept the students engaged especially as they waited to see the photo of their own tableau.

The students continued to complete their study guides as comprehension checks for Act II, but after reading Act III, the students were assigned to create a puppet show based on an assigned scene from Act III to demonstrate understanding. With the long tables against the wall tipped over on their sides, the puppet show *theatre* was ready for its performers to crouch behind the tables to act out their puppet show. The R&J activities created by the teachers to check for understanding engaged the students to work with their peers, despite the fact that the teachers directed the instruction. The puppet show task was assigned by the teachers so the students did not have the opportunity to take control of how to present their project since the directions had been provided by their teachers. The unit did not include a driving question typical of PBL instruction, nor were the students trying to solve some kind of real world problem. They laughed and giggled while they collaborated on both the tableau and the puppet show assigned by the teachers, so it seemed that they enjoyed completing those tasks. Specific examples and explanations of how the students used their language and literacy practices to complete the R&J assignments are provided in the next section.

As the R&J unit was wrapping up, GEO mentioned that the next project would be a large PBL unit where the students would be working in teams to create a presentation that they would present formally to city council. Their collaborative efforts in using their oral and written language and literacy practices to complete the R&J assignments would serve them well in the unit to follow. Since I had already selected the focal team of students, the teachers informed me that they would continue working together on the next project.

The Mountain Vista Project

The Mountain Vista Project (MVP) was a two week project that culminated with student presentations to city council. As the R&J project was coming to a close, Assistant Principal

Smith shared an email with me that she received from city council stating that an oil reservoir has been discovered in the next county, and the city was considering moving forward to drill and frack to extract the oil. She and the WNT teachers created the entry document shown below to launch the Mountain Vista Project (see Figure 4.1).

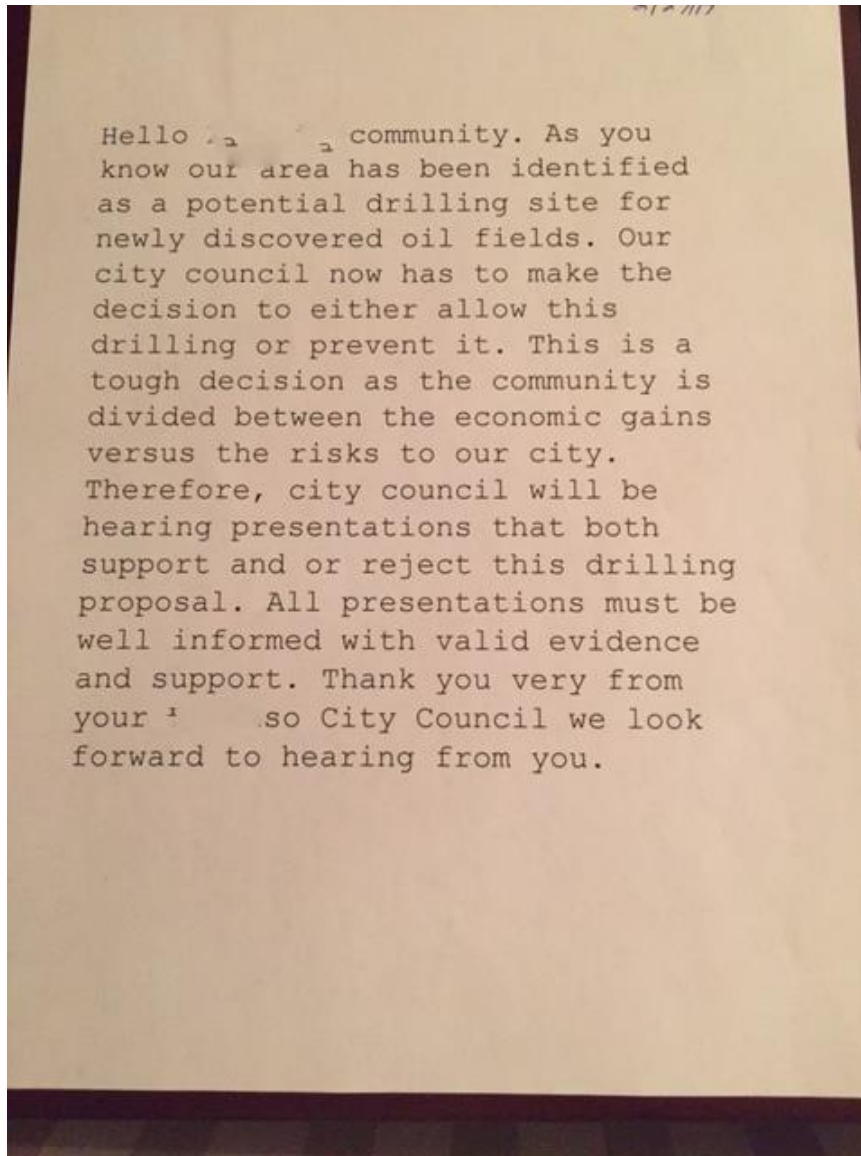


Figure 4.1: Entry document Mountain Vista Project

For this project, GEO was the lead teacher, and he explained to the students that an oil reservoir had been discovered in the neighboring county. He explained that the local city council called on WNT to conduct some research to help them determine whether or not the city should drill to extract the oil. The teachers gave each student a copy of the entry document (Figure 1). The teachers asked various students to read the entry document out loud. As they read through the document, the teachers would elaborate on concepts that were foreign to the students, for example, they asked the students if they knew the role of city council. When the students stated that they didn't know what city council did, the teachers explained their role in working to help the city thrive. The teachers emphasized that city council wanted the help of WNT to decide what action would be best for the city to pursue. The students were also unfamiliar with the processes of drilling and fracking and asked exactly what was involved. GEO explained to them that their task would be to research all the elements involved in this project and present their findings to city council. The students quickly began using Google to look up the pros and cons of extracting the oil and to find more information about drilling and fracking. The components of the MVP were very much aligned to the Buck Institute's PBL model to include having teams use an essential question to guide them in finding a solution to their real world problem (Larmer & Mergendoller, 2015). The design of the MVP project that included using an entry document, having the students use an essential question as a guide to research and culminating with a formal presentation to synthesize written and oral communication practices was the PBL standard within the New Tech Network (The New Tech Network, 2017). Each PBL student team was directed to research information regarding the real world effects of drilling and fracking and then develop a unanimous team position that was in the form of an essential question as to why city council should or should not proceed with the drilling and fracking.

Most of the students had heard about drilling for oil, but the concept of fracking was new to them. The teachers electronically sent all students various articles to help them understand what was required of extracting oil using drilling and fracking. The components of the Buck Institute's Gold Standard PBL includes that students present a "public product" (Larmer & Mergendoller, 2015). The culminating product of this PBL was not only the PowerPoint and accompanying artifacts, but the presentation by the students to present their argument in an effort to persuade city council present that their position was in the best interest of the city. The focal students overcame several challenges, but successfully presented to city council.

Throughout the MVP unit, the students were also completing various Texas English Language Proficiency Assessment System (TELPAS) writing samples required of all ELLs in Texas which greatly impacted how much time they could dedicate to the MVP. The TELPAS is designed to use Proficiency Level Descriptors such as beginning, intermediate, advanced and advanced high to measure the linguistic proficiency of second language acquisition for four domains: listening, speaking, reading and writing as alignment to the English Language Proficiency Standard (ELPS) (Chapter 39.027. Texas Education Code, 2013). Although required by the state of Texas, the TELPAS testing creating several setbacks for the students as they worked on their MVP presentation. Details about the TELPAS writing requirements and samples completed by the students will be including in the section on writing for accountability.

The MVP started with the students reading various articles and watching video regarding drilling and fracking to extract oil reservoirs that had been located in the neighboring county. The students worked in teams of four and were to unanimously develop a position that was either for or against the drilling project. The students developed team norms as the first task of the assignment, then with a division of duties worked to create a presentation for city council. The

student presentation to city council had two components. The students were to create a PowerPoint explaining their team's position on whether or not the city should move forward to extract the oil. The second component required the students to engage the city council in some kind of activity to persuade the members of city council to adopt their team's position to be in the city's best interest. The students also created various graphic organizers to illustrate fiscal benefits to drilling for oil along with maps that showed potential profit margin gains for the community. Throughout the MVP, the students were completing TELPAS writing samples along with completing district mandated benchmark assessments that affected the time dedicated to complete the project. Detailed examples showing how the students used their language and literacy practices to complete the MVP are included in the next section.

The students anticipated the culmination of the project because the next week was their spring break. So the students were looking forward to not only finishing their project but also starting their vacation. The students would return the third week of March to prepare for the state ELAR exam that was schedule to be administered the last week in March. Wilson High School was the only school to fail to meet the state accountability standards the year before, so the teachers stated that they were prepared to focus on the most challenging objectives to ensure positive scores for the students and for the campus. GEO mentioned that after the state exam, the students would be starting their longest PBL, an eight week unit, based on *The Odyssey* by Homer starting in April that would take them to the end of the school year.

The Odyssey

Although the PBL unit on *The Odyssey* was the longest project the students completed, they seemed to enjoy working on this assignment because they stated that they liked using their imagination to develop a script and create a film based on the story they read. After reading an

abridged version of the classic by Homer, the students were divided into two teams: New School and Old School. The Old School team was to film a more authentic version of the story where the students were dressed in togas and wore olive branch crowns, whereas the New School team was to film a modernized version of the story using props like GEO's truck as Odysseus' ship. The students were given the opportunity to plan and negotiate how they wanted to film their movie, and the teachers allocated days specifically for filming and editing before scheduling the much anticipated WNT film festival where the students finally watched their films. Like the unit on R&J, *The Odyssey* PBL was interrupted by common assessments administered by the district and state level testing for Algebra I and biology.

When the students returned from spring break, they did not immediately begin reading *The Odyssey* but instead spent a week preparing for the state English Language Arts state assessment. Although the PBL units that the students had completed engaged them to read and write on a daily basis, the teachers felt that the students nonetheless had to review the format and question types of the test to ensure successful student scores. After the administration of the state exam, the students started reading abridged versions of 15 chapters of *The Odyssey* by Homer. It took the students about six weeks to read all 15 chapters. After reading each chapter the students completed study guides that the teachers used to measure their content understanding. As the students finished reading the play, the WNT teachers explained the project that they would be starting. The students were to create their own film version of *The Odyssey*. Students were divided into the Old School team and New School team, and jobs such as director, script writer, costume director, set director, etc. were assigned to every student to help the teams complete their film. The students worked on details of their film creating

characterizations on paper as models for their actors, filming schedules to organize their time and descriptions of how areas on campus could be used as settings to authenticate their film.

The teachers created various activities to check for content understanding such as playing games and conducting gallery walks using the classroom windows. The teachers were able to quickly assess student learning by having the students demonstrate their understanding of the content knowledge by orally expressing what they understood during a game such as Kahoot or write out a chronology or characterization on the window as part of a gallery walk. The artifacts created by the students were filed in a binder so that students could have a systematic way to reference information they created such as costume designs, set details or map information. As the students prepared for filming, they once again stopped their project work for a week for the administration of the state Algebra I and biology exams. After the state exams, the students continued filming, revising and editing their script and their movie before submitting their finished product to their teachers. The students gathered together to watch their movie creations during the WNT Film Festival where several students were also recognized for their hard work in completing the project.

Oral Language and Literacy Practices

The goal of this study was to understand how the language and literacy interactions of ELLs in a New Tech classroom helped shape their academic language and literacy. To comprehend the role that language and literacy played, it was important to understand how the students used their oral language and literacy practices along with their written literacies. Recognizing how the day to day interactions within the WNT classroom contributed to the students' use of academic language and literacy practices to gain knowledge and express meaning, this chapter addresses the first sub-question: What are the oral and written language

and literacy practices that New Tech students use to complete their PBL tasks? Using Gee's Discourse Analysis (2012) along with language interactions identified by Zentella (1997), such as *on the spot, in the head or out of mouth* the first half of this chapter focuses on the students' oral language and literacy interactions. The oral language and literacy practices concentrate on how the students use code-switches in the act of "mothering" (Zentella, 1997, p. 72) or taking care of others, within conversational or informal exchanges and finally in their demonstration of power. The next section of this chapter centers on how the students engaged in written language and literacy practices to satisfy state accountability, then transitions into identifying how students created artifacts that displayed their written student literacies to demonstrated meaning making and content understanding.

Language is about communication and can come in many forms to include gestures, sounds, or signs (García & Wei, 2013). Language is part of our everyday activity and is displayed by persons of all ages and within all cultures. Garcia and Wei (2013) state that language belongs to the students that use it, but for ELLs in US schools the language that they use often comes with a label. The distinction between First Language (L1) and Second Language (L2) is often perceived as negative and constricting for ELLs. If the learning environment promotes an English only setting, then immediately the L1 is cast as subordinate to the L2 which the students are still learning. But if a classroom promotes the kind of linguistic diversity that allows students to focus on meaning making, students will be able to demonstrate content understanding using all their available language resources whether it is L1, L2 or a combination of the two. Bilingual languaging is not based on an L1-L2 binary, but rather on an integration of language resources within the bilingual learner. Thus, ELLs are able to seamlessly

draw on what they know to creatively express themselves through *translanguaging* (García & Wei, 2013).

Gee argued that *discourse* was language in use through conversation, discussion, or stories. *Discourse*, with a capital D however, was more than just language use as it embodied a social practice that included how language was used in speaking, listening and interacting with others in a social setting (Gee, 2012). The students of WNT used various forms of Discourse (big D) to discuss and negotiate various ideas presented as part of their PBL project. This chapter focuses on how the students of WNT used their language and literacy practices within their New Tech classroom. The New Tech classroom setting provided the students with the space to explore various multi-modal forms of communication that facilitated their oral and written literacies.

Translanguaging Interactions

Before the use of the word *translanguaging*, Zentella (1997) focused on how ELLs intermingled their English and Spanish that she described as “Tex-Mex or Spanglish” (p. 81) code switching and acknowledged that their language practices were a “complex and socially interactive process” (p. 83) that they used to communicate. Garcia and Wei concurred that translanguaging was more than just switching words in two different languages:

“Translanguaging differs from the notion of code-switching in that it refers not simply to a shift or shuttle between two languages, but to the speakers’ construction and use of original and complex interrelated discursive practices....” (Garcia & Wei, 2013, p. 22). So the focus of translanguaging was not so much about the switches of specific words, but rather about the communicative intent of the speaker and their intentional use of translanguaging to make meaning.

Zentella (1997) identified three linguistic exchanges that the participants of the New York Puerto Rican community used to communicate and establish meaning. Drawing on the linguistic exchanges identified by Zentella as a foundational basis, I applied the three languaging interactions to my study in a more thematic approach to help me understand how and why the participants of my study were using certain linguistic exchanges to communicate with others. Rather than analyze their languaging exchanges using a linguistic perspective as did Zentella (1997), I applied the language exchanges thematically to understand and examine how the students were using various languaging exchanges to make meaning and demonstrate understanding.

The three linguistic exchanges identified by Zentella (1997) included (1) On the Spot communication which was a mix of various factors leading up to the actual interaction of the speaker. Factors that affected how language was used included the setting of the conversation, the listeners or interlocutors involved in the conversation along with social cultural values of the setting. A combination of these factors determined “on the spot” how the students spontaneously used their code-switching to communicate. (2) In the Head communication was more deliberate as the speaker took into account how the listener would respond to their verbal interaction. Sometimes speakers would use specific words to gain “approval or attention” (Zentella, 1997, p. 93) from the listener and would then intentionally change their choice of words in the head to accommodate their linguistic intention. (3) Out of Mouth was more aligned to the Garcia and Wei’s (2013) definition of translanguaging but also referred to as Spanglish by Zentella. Out of mouth code-switching was characterized by a deliberate choice of words, phrases or “expressions to communicate meaning in one language or another” (Zentella, 1997, p. 83). The

intent of out of mouth communication was deliberate as the students selected specific words and phrases to most effectively communicate using their code-switching practices.

Out of mouth thematic shift – mothering.

Zentella (1997) explained how the focal children in *Growing Up Bilingual* shifted or changed their code-switching to either express emphasis/clarification or change the role of the speaker in what was referred to as *footing* (Goffman, 1979). The WNT students often demonstrated examples of thematic footing as they worked collaboratively on their PBL projects. It was not unusual for them to shift their footing to translanguage for clarification or emphasis, but there was also a change in footing when they exemplified a thematic shift in their position from friend to protector in the role of mothering (Zentella, 1997). What was most interesting about listening to the students shift from friend to protector was that it was divided by gender as I observed only the two focal girls demonstrate this type of footing but never did I observe Ramón shift his footing from friend to protector. Of the four focal students, Ángel was the only student to carry the LEP code. It would be difficult to know exactly why Ángel still carried the LEP code since he had been enrolled in Texas public schools his entire life. At this point, he was considered a long term English Learner (Olsen, 2014) because he had not yet reached English language proficiency. Olsen (2014) argued that a student was considered a long term English Learner if they have been enrolled in public school for more than six years but have yet to demonstrate language proficiency. If Ángel demonstrated evidence of non-reciprocal fluency to the TELPAS rater in the area of speaking, that may have prevented him from reaching a proficient TELPAS score that could have removed the LEP code. Because he still carried the LEP code as many long term English learners do, he was often pulled from his WNT class for TELPAS testing whereas the other three focal students always remained in class because they

did not carry the LEP code. Because Ángel was receiving extra language support, the girls on his team may have felt that they needed to take care of him resulting in the shift in footing to mothering.

Often times, when the students were intently working on a project, suddenly one of the girls, either Hadie or Jessica, would divert from their project to check on Ángel. During the R&J project, the students were working on re-writing one of the scenes when suddenly Hadie stopped what she was doing and asked Ángel, ¿Si sabes lo que tenemos que hacer? (*Do you know what we need to do?*) She paused but did not receive an overt response from Ángel. Hadie continued, “Como aquí escribes – they are going to fight, así.” (*Like right here you write – they are going to fight, like that.*) (Field notes, 2/22/17). Hadie not only demonstrated a footing turn as she shifted from her work to Ángel’s progress, but within her footing she translanguaged using an out of mouth exchange to specifically focus on the theme of fighting by stating that the characters in R&J “are going to fight” to ensure that Ángel was directing his attention to the proper theme of the assignment.

During the MVP the students were to research the positives and negatives of drilling and fracking. The four focal team members were all reading the same article sent to their WNT webpage by the teachers. As each of the team members were listing positives and negatives in Standard English into their own notebook, Hadie once again stopped what she was doing to check on Ángel. Hadie saw that Ángel was still reading a section that identified the positives to drilling and fracking, but she noticed that he had not yet written down any of the positives listed in the article. Hadie reached across the table and pointed to a section of the article Ángel was reading and stated, “It’s a positive. Está en parenthesis el first one. (*It’s in parenthesis, the first one.*) Read it over” (Field notes, 3/1/17). In this instance, Hadie pointed out the exact example

of a positive attribute to drilling and fracking using an out of mouth code-switch, but she also directed him to keep reading to ensure comprehension. Ángel did not reject her help, but again he did not overtly thank her either, but wrote down the example that Hadie referenced. Jessica also commonly demonstrated a shift in footing as she transitioned from friend to protector over Ángel and even at times over Hadie. When the students began researching the effects of drilling and fracking for the MVP, they had many questions for their WNT teachers as this concept was foreign to them. The teachers directed the students to read an article sent to their WNT website then proceed to answer some basic comprehension questions after the article based on their reading. All the students read silently, but were allowed to discuss the comprehension questions collectively before submitting their responses electronically. Although the questions were sent electronically to the students, they all quickly took out a sheet of paper to take notes once they finished reading. Hadie finished first followed by Jessica then Ramón. Hadie started reading the first question out loud to the group while Ángel finished reading. The team had already answered five of the 10 questions when Ángel finished reading the article. He, too, took out some paper to jot down his notes when Jessica asked:

Stanza 1

¿En dónde vas? ¿Ya mero acabas? (*Where are you? Are you almost finished?*)

Ángel then explained to Jessica that he was looking for something. With a furrowed brow, Jessica responded but seemed almost frustrated.

Stanza 2

¿Lo estás buscando? ¿Porque no nos dices? (*Are you looking for it? Why don't you tell us?*) (Field notes, 3/1/17).

Her concern came with what seemed to be a reprimand as she directed him to let them know when he couldn't find something. In Stanza 3, Jessica showed that she wanted to ensure that Ángel was working on the right section of the assignment.

Stanza 3

“¿Ángel, si sabes dónde vamos?”
(*Ángel, do you know where we are?*) (Field notes, 3/31/17).

Once again, Ángel did not acknowledge verbally that he did in fact know from where they were reading, but instead without saying anything he looked over at Jessica's paper, which she quickly pushed over to his side of the table so that he could start copying her answers. Jessica then saw that Ángel was copying her answers word for word, then quickly clarified what she wanted Ángel to do:

Stanza 4

“Yo lo voy hacer like answers y luego lo copeas para que no estemos....”
(*I'm going to write it like answers then you can copy it so that we are not....*)

Jessica realized that Ángel was copying her answers verbatim but then stopped suddenly and shifted her code-switching to mothering Ángel:

Stanza 5

“Te me haces muy lejos. Siento como que te estamos haciendo...”
(*You seem far away. I feel like we are making you...*) (Field notes, 3/31/17).

Jessica, Hadie and Ramón were all sitting at the edge of their chairs grouped around Hadie's tablet that was in the center of the table. Ángel, on the other hand was sitting back in his chair as he copied Jessica's notes. Jessica immediately noted that Ángel was simply further away from her than the others. In both instances, Jessica did not finish her thoughts, but she

demonstrated a shift in her code-switching to emphasize that she was writing the responses “like answers” possibly to indicate that she was going to write what the answer should look like. Her sentence ended with what seemed like a caution when she said, “then you will copy it so that we are not...” Although she allowed Ángel to copy her answers it seems that she may have been concerned that he was copying them word for word, but she didn’t finish her thought to explain her concern. What is clear is that she demonstrated a shift in footing from friend to protector to ensure that Ángel was following along with the assignment. As part of their on-going research, they continued to receive different articles about drilling and fracking and with every article they had to answer comprehension questions. Ángel continued to use Jessica’s notes to write out his answers, but he recognized Jessica’s concern that their answers should not be identical. After reading another research article, he wrote out his answers again using Jessica’s notes. As he finished writing, he then showed his work to Jessica and said, “Aver, ¿así?” (*Let’s see, like this?*) (Field notes, 3/3/17). This exchange confirmed that Ángel had been receptive to the mothering demonstrated by Jessica and was also seeking her approval as he completed his assignment.

There were also times that the mothering Discourse involved the two girls. As the students were working to finish their MVP presentation, they were putting together their final presentation. Hadie and Ramón were working on the PowerPoint presentation while Jessica added color to the area map and Ángel finished the graphic organizer illustrating the pros/cons of drilling and fracking. With everyone working on a different aspect of the project, what was still pending was the creation of some kind of a 3D artifact to illustrate their position. The team had not yet agreed on what the 3D project would be, but they knew it had to be completed quickly. Hadie had assigned herself the role of the team’s Task Manager and quickly took the lead and offered to create the project.

- 1 Hadie: Yo hago el 3 D Project si quieres. (*I'll do the 3D Project if you want.*)
- 2 ¿Segura? No porque todos tienen que trabajar porque es mucho.
(*Are you sure? No, because everyone has to do it because it is a lot*) (Field notes, 3/6/17).

Interestingly, Hadie's out of mouth code-switching intentionally emphasized the one part of the project that was still pending, the 3 D project. Jessica's response reflected her concern for Hadie that she could not complete the 3D project by herself because it was a lot of work. Jessica recognized that the 3D project had to be completed by the group because there was so much to do. Hadie accepted Jessica's role as protector and nodded with approval that the 3D project was a lot for one person.

The code-switching of the students reflected thematic out of mouth emphasis on various words, phrases and clauses, but it also signaled changes in their role as speaker. The footing shift from friend to protector created a feeling of confidence and trust within the team members providing them with the sense that someone cared about what they were doing and how they were doing it that allowed them to work successfully to complete their PBL projects. The girls often looked out for Ángel to ensure that he was on par with the assignments, but the girls offered support to each other as well and accepted that support as they progress with their projects. As the students completed their projects, they were exposed to new academic language that they learned to integrate into their working vocabulary.

On the spot conversational language.

The students used their conversational language as they socialized informally before and after class, but they also used their conversational language to discuss, clarify and explain concepts that were new or interesting to them. The students did not exclusively translanguage

when talking to each other, but more often than not they were speaking standard or colloquial Spanish with one another reinforcing the confidence and trust they felt with their peers in a sense of solidarity. When the students were reading R&J, they were introduced to the character, Paris, who was in love with Juliet. But, the idea that someone was named Paris was new to these ELLs. The students were given an assignment to draw each of the characters in the play. As the students were drawing their characterizations, I saw Ramón lean over to Jessica and ask, “Paris es un guy? ¿Como cholo?” (*Paris is a guy? Like a cholo?*) (Field notes, 2/16/17). Ramón was not able to begin to draw a picture of Paris because he was unsure about Paris’ gender. Ramón realized that Paris was one of two things: Paris was either a girl or he was a guy, like a *cholo* or gang identified person (Mendoza-Denton, 2008), who was challenging Romeo for Juliet’s love. Jessica didn’t flinch when Ramón compared Paris to a *cholo*, she simply clarified that he was a guy. By using his colloquial Spanish, Ramón knew that he could confidentially ask Jessica about Paris’ gender without her teasing him because he didn’t know if Paris was a male or female. Ramón’s on the spot code-switching was not prompted by him trying to be funny or even sarcastic, he merely drew on an example that was easy for him to understand in order to properly characterize Paris.

The on the spot code-switching often captured spontaneous emotions as well. When the students were frantically preparing for their puppet show performance, they were given only 10 minutes to prepare. Within those 10 minutes, the students had to re-write the events of their scene in their own words and create their puppet show performance. The short time limit caused some anxiety as suddenly the students were talking very rapidly, and they became increasingly louder as the time limit approached. At one point all the students were simultaneously giving each other instructions making the final preparations for the puppet show somewhat chaotic.

ELA was calling on teams to perform their puppet show in chronological order based on Act III, and the students who were watching the performances tapped their feet and some bit their lips anxiously awaiting their turn to perform. Finally, the focal students were next. As the students walked over to the make shift performance area where the tables were tipped over on their sides, they were still confirming with each other who was going to say what. As the team walked over to the performance area and crouched behind the tables to get into position for their puppet show, angry whispers could be heard as they were giving each other last minute on the spot directions. They performed their puppet show exactly as they had written it, although their performance lacked some emotion. They used their own words to tell the story of their scene, but almost all of the puppet shows lacked some of the excitement that was evident within the play. After their performance the focal students quickly walked through the classroom into the hallway. Once they were in the hallway, with an electrified smile on his face Ramón turned to his team mates and shouted, “I killed it!” (Field notes, 2/22/17) in English as they all laugh uncontrollably, relieved that their performance was over. It seemed Ramón was most surprised by his own performance which led to his on the spot prosodic declaration announcing that he felt he was really the best puppeteer of his group. His on the spot announcement to his group and to himself was genuine and authentic, aligned to the theme within R&J, and it captured the emotion of the moment. The puppet show demonstrated how the students used their conversational language to interpret the play, and then showed how they used the academic language of the classroom to re-write the scene and present their performance.

After the students finished the R&J unit, they transitioned to write one of the required TELPAS writing prompts. The students were to write about a time they did the wrong thing for the right reason. Once they finished their paper, ELA started a whole group discussion by asking

the class to explain the difference between right and wrong. Several students volunteered examples until Ramón stated that “doing the right thing is right and doing the wrong thing is wrong.” His in the head explanation immediately drew groans from the rest of the class, but he responded with an almost angry on the spot prosody, “¿Apoco no?” (*How is that not true?*) (Field notes, 2/27/17). With his response, he challenged the class to refute his statement especially by responding in Spanish. Had he responded with the English translation of that interjection by asking “How is that not true”, it would have functioned more as a question rather than a challenge to the class. The contextual implication of the Spanish “*Apoco no?*” functioned as an emphatic statement instead of the English translation that asked a question. He was quickly supported by ELA who stated that Ramón was not exactly wrong in what he stated because sometimes the difference between right and wrong might be blurred as in R&J when the nurse kept information from the Capulets to allow Juliet to see Romeo.

As the students transitioned to the MVP, the intensity of the work load increased because the students had to complete some very challenging tasks for their presentation to city council. Once the students agreed on a position either for or against the drilling and fracking, they had to create a PowerPoint persuading city council that their position was in the best interest of the city. Ramón and Ángel were tasked to collect pictures for the PowerPoint while Hadie, as the task manager, was overseeing that all the aspects of the project were being completed in a timely manner. Ramón was scrolling for pictures online as Ángel was looking over his shoulder.

- 1 Ángel: Vas a poner todos esos slides? (*Are you going to include all those slides?*)
- 2 Ramón: Voy a sacar más pictures para que se vea más papo. Y más bien acá – ¡Vamonó!
(*I'm going to get more pictures so that it can look really great. And much better – Let's go!*) (Field notes, 3/6/17).

Ramón's code-switching response to Ángel placed emphasis on the thematic pictures that he needed to collect for the project regarding drilling and fracking. He used many colloquial or slang Spanish phrases such as *más papo* to show that his presentation would not only be good, it would be great with these added pictures. He finished his statement with a prosodic on the spot incentive *¡Vamonó!* that even brought a smile to Ángel's face, showing that Ramón was pleased with his work and was ready to continue. When Hadie heard this exchange between Ramón and Ángel, she looked up at them and Ramón proudly showed her the pictures he had been collecting. As Hadie was studying each of the pictures on Ramón's tablet, she responded with the same type of on the spot interjection that Ramón used previously by saying, "¡Esto está bien papo!" (*This is really good!*) Her use of the same colloquial Spanish spoken by Ramón reinforced their sense of solidarity in supporting each other to complete their project.

Hadie also exhibited a thematic on the spot prosody based on *The Odyssey* project while she was reviewing the script for the day's filming. At the start of every class period, the teams would review what they needed to film that day. Hadie was writing out a list of props that were needed to film chapter 5 of *The Odyssey*. Once her list was complete, Hadie as the co-director started to read the script that the writers had written for the scene to be filmed that day to ensure that she had everything she needed. I saw her reading the script, softly mouthing the words to herself when suddenly she exclaimed, "What the hell?" She quickly looked around to find other members of her team and in a rapid high pitched prosodic voice asked one of her team members, "Have you read the script? They changed it! Es que aquí en la story lo ponen enfrente del niño." (*It's that here in the story they put him in front of the child*) (Field notes, 4/20/17). Clearly the script writers changed chapter 5 and the specific changes were emphasized in Hadie's code-switching. Within her translanguaged sentence, she further emphasized the word *story* referring

to the text of the play where the writers deviated from the original text. These changes consequently affected what and how they were going to film for the day so as co-director, these changes were significant. Hadie immediately walked over to Walter, one of the script writers, to ask him why they changed the scene. The other co-director, Alice, came over and Hadie told her that the script was now different. Ultimately, the writers explained that they were still editing, and if necessary they could keep to the text so that filming could go on as planned.

Alice, who was Hadie's co-director partner, also exhibited a spontaneous on the spot interaction during the filming of *The Odyssey*. As is often the case with any high school film production, the students were serving in multiple roles. Alice was not only the co-director, but she was also playing the part of Calypso, who was in love with Odysseus. On one particular day, the students were filming in the beautiful and scenic Wilson High School patio that the students call The Square. The Square was in the center of the four academic buildings in the school. The park-like square was lined and landscaped with several trees and shrubs that provided shade for the many concrete benches that the students gravitated to during lunch. In the center of the square was a large sunken outdoor theatre with concrete stairs that surrounded and led down to the performance area. The school used this area for pep rallies and other special performances, but on this day it was the perfect for the filming of Homer's Greek tragedy. The scene to be filmed on this day called for Odysseus to collapse on the ground after traveling a long journey. As Calypso walked by, she saw him and ran to help him. After finding Odysseus, Calypso's line was, "Oh my god, are you ok?" Everyone was in place, and they were ready to film. GEO shouted, "OK – 3, 2, 1 Action!" Calypso was walking through the patio when she saw Odysseus thrown on the ground. Suddenly she ran toward him and then stopped and said, "Hey, wait a minute! I can't say 'Oh my god' because I am a god. That would be like me saying, 'Oh my

me!” Both GEO and I laughed at her on the spot wit, but not all the students caught on to what she was saying. GEO explained to everyone that they were going to film that scene again and that Alice i.e. Calypso, would modify her line. Take 2! Calypso started walking through the patio once again, when she saw Odysseus on the ground. Calypso ran toward him and said, “In the name of Zeus, are you ok?” (Field notes 5/18/17). Her response was not an on the spot prosodic exclamation, but rather it was an in the head thematic interjection that aligned the content of the story to the emotion of the character. GEO looked over at me and simply said, “She’s amazing.” Clearly, her wit and quick manipulation of the language demonstrated a complex in the head linguistic interaction. ELA had previously asked me if the students were making higher order connections to the themes of the story. Alice’s quick manipulation of her lines was an indication that the students were in fact making connection between the themes and the characters of the story. Because the students were experiencing the scenes through their acting and not just passively reading the play, they fully understood what was happening and more importantly they understood why certain plot events were happening, hence Alice’s on the spot editing of her lines. Once Alice said, “In the name of Zeus, are you ok?” the students understood her reference to the god, Zeus, and why the original script that read “Oh my god, are you ok?” had to be adjusted.

In the head discourse organization.

In the head exchanges, according to Zentella (1997), were intentional verbal interactions where a speaker expressed knowledge and/or shared values with the purpose of anticipating a response from the interlocutor or interactant. Because the speaker’s seeks a specific outcome from the interaction, they will carefully select how they express themselves as they initiate the interaction. The in the head exchanges could include code-switches that signaled community

membership or solidarity to emphasize specific components of their language practices. When Alice expressed her concern with the script using an on the spot objection, she carefully executed a thematic in the head correction that was aligned with the scene they were filming and at the same time satisfied the contextual clues of the Greek mythology. Throughout the three units, the students expressed in the head exchanges with the intent of expecting specific outcomes from their listeners. During the R&J unit when the students were tasked to draw characterizations from the play, Ramón was thinking pensively on how to draw Romeo. “Lo único que se es que Romeo turned from a cry baby to a killer.” (*The only thing I know is that Romeo turned from a cry baby to a killer*) (Week 2 memo). Ramón’s statement was not only a fairly accurate description of Romeo’s transformation throughout the play, but it drew some laughter from his team. Shakespeare’s characterization of Romeo at the start of the play was that he was lovesick for Juliet, but he later fought with Juliet’s cousin, Tybalt, and ultimately killed him. Ramón’s intentional code-switching also placed emphasis on his in the head analysis of Romeo’s transformation. He used his Standard Spanish to explain to his table mates what he understood about the play, but transitioned to Standard English to emphasize what he felt was significant regarding Romeo’s character shift. Ramón’s in the head code-switching placed emphasis on the polarized descriptions of Romeo characterizing him on one hand as a cry baby when he was lovesick then describing him as a killer on the other hand when he killed Tybalt.

Using in the head code-switches for emphasis that were aligned to the various themes they were learning were demonstrated by the students during their daily interactions. Before starting the MVP, the students were tasked to write out a team contract listing the norms that they would agree to follow during their project (See Appendix G for a template of the team contract). The teachers informed the students that each team would have a Task Manager to

ensure that all the assignments were completed in a timely manner along with a Norms Manager who would make sure their team rules were followed with fidelity. The focal team decided that Hadie would be best as the Task Manager, and Jessica would be the Norms Manager. The team needed to create at least three rules that they would agree to follow. After some discussion and several interruptions from students buying burritos from Ramón, the focal team create two somewhat generic rules such as *show up on time* and *don't be absent*. To those rules they added, *don't use the phone, no wandering around*, and *stay on task* for a total of five team norms. With only four minutes left in the class period, they were stumped in coming up with one last team rule that they felt they needed. Ángel reminded the team that they had only four minutes left if they wanted to add another rule.

Stanza 1 (Trying to agree on the rules)

- 1 Jessica: ¿Cuáles otros rules? [Jessica pauses then looks over at Ramón.] No estar vendiendo. (*What other rules? No selling.*)
- 2 Ramón becomes loud and agitated: Nah, nah no eso no. I don't agree, do you agree, sir?
- 3 Ángel: ¿En cuáles? (*Agree with what?*)
- 4 Hadie: No selling.
- 5 Ramón: No no no - quítalo. I don't agree. Do you agree sir? (*No no no - take it off*)
- 6 Jessica: Either way you can't be selling during school.

Stanza 2 (Alternative suggestions)

- 7 Ramón: Put, let's put no wandering around, that one is better, because you know burritos are my life, and I can't stop selling.
- 8 Hadie: We need more rules. Ya tenemos (*we already have*) don't use phone if not necessary, no wandering around, stay on task...
- 9 Ramón: Stay with your group.

- 10 Jessica: Es lo mismo ¿no? No wandering around. No se, pues vamos a poner no eating. (*It's the same isn't it? No wandering around. I don't know, so let's put no eating.*)
- 11 Ramón: No eating in class - that one is better than no selling. ¿Que les cuesta? Nada nomás ponerle, no eating. (*So what does it matter to you? Nothing, just put no eating.*)
- 12 Jessica: No visiting, other people.
- 13 Ramón: ¡No, no no!
- 14 Hadie: Yeah, no visiting other people.

Stanza 3 (Resolution)

- 15 Ramón: Entonces que vengan ellos y me compren. (*So then they need to come to me to buy.*)
- 16 Ángel: Si eso es que quieren. (*That's if they want to.*)
- 17 Ramón: El cliente lo que pida. (*Whatever the customer wants*) (Field notes, 2/27/17).

This thematic exchange in setting up the project norms demonstrated various in the head interactions between the focal students that may have intentionally reflected some subliminal frustrations due to the constant flow of interruptions from the burrito sales. With only four minutes left in the class period, Jessica disrupted the working environment in line 1 by stating in Standard Spanish that one of the rules should be no selling. Her use of Standard Spanish may have been an attempt to align herself in solidarity with Ramón, but he quickly challenged her suggestion. His challenge in line 5 included the use of Standard English, the language of their team rules, while at the same time he tried to align himself with Ángel by referring to him as “sir” assigning a sense of power to Ángel’s position. Ramón directed Hadie to remove *no selling* as a rule and once again asked Ángel, “Do you agree, sir?” Before Ángel could answer, Jessica reminded Ramón in line 6 that the school rules already prohibited him from selling burritos on campus so the pseudo authority that Ramón was assigning to Ángel was irrelevant. Ramón

realized that Jessica was right, so he then proposed an in the head solution in line 7 using Standard English that he felt could appease everyone on his team, “Let’s put no wandering around, that one is better, because you know burritos are my life, and I can’t stop selling.”

Ramón continued his in the head attempts to find agreeable guidelines that would satisfy all the team members by suggesting possible rules that they could use, and he even agreed to the rule that they cannot eat in class. Just as it seemed that things were calming down, Jessica made an in the head suggestion in line 12 that one of the rules be that they cannot visit other people. As expected, Ramón immediately rebuffed her suggestion, because once again he used his in the head business-like Discourse in stanza 3 justifying his sales stating that if they can’t visit other people, then his customers must be able to come to him to buy their burritos. The exchange ended with another in the head statement from Ramón, this time in Standard Spanish, where he not only emphasized his philosophy as a salesman, “El cliente lo que pida” (*Whatever the customer wants*), but again attempted to establish solidarity with his team and with his customers by expressing his mantra in Standard Spanish. His use of Spanish aligned him with his customers because when they would approach him, they were talking in Spanish. Ultimately the team agreed to keep the original five team norms including *no wandering around* and felt that they did not need an additional team norm. The *no wandering around* rule satisfied Ramón because it allowed him to continue selling his burritos and by agreeing to that norm, the team was able to complete their contract and move forward to the next project.

As the MVP continued, the language practices of the students centered on trying to come to a consensus about their position regarding drilling and fracking. Because the students would have to develop a presentation to persuade city council to adopt their position, they had to make

sure they could justify their argument and establish how extracting the oil would or would not benefit the community.

- 1 Jessica: ¿Pero que vamos hacer? Lo vamos hacer oppose? Or lo vamos hacer....
(*So what are we going to do? Are we going to oppose? Or are we going to...*)
- 2 Digo que we should do it now, (*I say we should do it now,*)
- 3 nomás que tengan – (*as long as we have-*)
- 4 let's provide them with a solution pa'que tengan más cuidado. (*let's provide them with a solution so that they can be more careful.*)

Jessica was unsure on her position, so she pressed her team in line 1 to state whether they were for or against the proposal. In line 2 she stated her sense of urgency and even provided a solid plan to include a solution with their proposal in line 4. Unfortunately, despite her efforts, the team could not come to a consensus. Because the team's position was not unanimous, I asked each of them if they were for or against the drilling and fracking and remind them they needed to agree as a team. Hadie stated she was against it, while Jessica and Ángel both had not committed to either side. Ramón saw that Jessica was on the fence, but more importantly Hadie's position was clearly contrary to his position of moving forward with the drilling. If Hadie sided with him, then very likely Ángel and Jessica would follow suit. As the students continued to read more about the process of drilling and fracking, Ramón's Discourse focused more and more on how the community would benefit economically from the drilling and fracking. The girls still had not committed to a position so Ramón took the opportunity to try to persuade them to see his position. Ramón then launched an extraordinary in the head Discourse focusing on the fiscal benefits of extracting the oil. He took a chance as he established his argument by asking Hadie

about what her grandfather did for a living. The fact that Hadie's grandfather was a mechanic, Ramón immediately realized that a mechanic could greatly benefit from the drilling and fracking.

Stanza 1 (Ramón setting up his argument)

- 1 Ramón: No, but watch, ...¿tus parents en que trabajan? (*What job do your parents have?*)
- 2 Hadie: Mi grandpa es mecánico. (*My grandpa is a mechanic.*)

Stanza 2 (Ramón justifying his argument)

- 3 ¿Tu grandpa es mecánico? (*Your grandpa is a mechanic*)
- 4 ¿Pues imagínate, tu grandpa es mecánico, verdad? (*Ok, imagine, your grandpa is a mechanic, right?*)
- 5 So imagínate todos los TRAYlas llenos de aceite y todos esos van a venir aquí. (*So imagine all those TRAILers filled with oil and they are all coming here.*)
- 6 So those trucks que se hagan bad, pues los van a traer y va aver MUUUcho work para los mechanics and y para los truck drivers! (*So those trucks that break or go bad, they will bring them here and there will be a lot of work for the mechanics and for the truck drivers!*) (Field notes, 3/6/17).

Ramón's on the spot question in line 1 asking Hadie what her grandpa did for a living allowed him to develop a solid in the head argument based on the theme of promoting drilling and fracking. To persuade Hadie of the benefit of moving forward with drilling and fracking, he reminded her in line 5 that oil filled trailers and trucks would be coming into town and needing repair that ultimately would lead to increased work for truck drivers and mechanics like Hadie's grandpa. Although the prospect of providing jobs for an economically depressed area was enticing, Hadie was still not completely convinced that moving forward with the drilling and fracking was a positive move for the city. The students continued to discuss how the earth could be affected by the process of drilling and fracking.

- 1 Jessica: ¿Pero el mundo se va acabar algún día, no? (*But the earth is going to end one day, no?*)
- 2 Hadie: ¡Si se va acabar, y va quedar el hoyote! Y luego lo que leemos la semana pasada es que la agua se hace pollute por la gas y por el oil.
(*Yes, it will end, but what will be left will be the big hole! And then, what we read this past week said that the water will become polluted because of the gas and the oil.*)
- 3 Ramón: Pero aquí no hay water near us. Ay el Rio Grande pero ya no hay agua. Ya casi no ay agua.
(*But here there is not water near us. There's the Rio Grande, but there's no more water.*)
- 4 Hadie: Exactamente, por eso. (*Exactly, that's why*) (Field notes, 3/6/17).

Jessica tried to settle the developing argument between Ramón and Hadie with an in the head statement in line 1 referencing that no matter what happened, the world would ultimately come to an end anyway. Jessica's statement, however, did not settle the tension between Ramón and Hadie, and Hadie responded to her statement in line 2 with an in the head declaration that the world would end and the end result would be a great hole as a result of the damage to the earth. As the students continued to read the articles sent by their teachers regarding drilling and fracking, Hadie was starting to speak more and more about the ecological danger to the earth that could result from the process of extracting the oil. Her environmental Discourse regarding the earth attempted to further justify why the drilling and fracking would be detrimental and the readings sent by the teachers further supported her argument. Ramón continued to challenge her by stating that the drilling and fracking could not pollute the water because the Rio Grande didn't have any water anyway. Ramón's in the head response that the river was already dry seemed to further justify Hadie's argument that the world was already in trouble and extracting the oil would further compound this issue.

As the students presented their in the head arguments to their peers, their use of code-switching strategically placed emphasis on the thematic points they were trying to make. Ramón's code-switching was used to communicate an economic Discourse that helped establish his argument where he emphasized how the process of extracting the oil could benefit the community. During Ramón's economic Discourse to Hadie, he tried to gain her attention by using Standard English when he said, "No, but watch..." Knowing that his argument would lead to a personal connection with Hadie, he then switched to Standard Spanish to align himself with her in solidarity and asked, "¿Tus parents en que trabajan?" *What job do your parents have?* Hadie's unexpected response stating that her grandpa was a mechanic was exactly what Ramón needed to strengthen his argument that the city, including mechanics like Hadie's grandpa, could benefit financially from moving forward with this process. Ramón's impassioned in the head justification to Hadie asked her twice in Standard Spanish to just imagine the possibilities that this opportunity could bring to someone like her grandpa. His argument included prosodic emphasis on key words such as TRAYlas, knowing that mechanics would be working on such trailers, and emphasis on the word MUUUcho as he referenced the work load that would be coming to the city once such a project was approved by city council. He made sure to include that the trucks that go bad would bring work for mechanics and truck drivers knowing that in this scenario, Hadie's grandpa could benefit from the work the drilling could bring to the city.

The arguments shifted to an environmental Discourse or theme between Jessica and Hadie where they were both using their Standard Spanish with code-switching that emphasized the damage that the earth would suffer. Hadie agreed with Jessica that the world would someday come to an end. She reminded all that we would be left behind with a gaping hole as a result of the damage to the earth. Hadie then code-switched with emphasis on the words pollute and oil –

the detrimental components that could cause the gaping hole to which she referred. Ramón attempted to appease her by stating that the water could not be polluted because there was no water in the river to pollute. His reply to Hadie was in Standard Spanish, but code-switched what he identified as a solution to Hadie's concern that there was no water in the river to pollute. Hadie responded to Ramón in Standard Spanish when she exclaimed, "Exactamente, por eso." (*Exactly, that's why*) as she aligned herself with her table mates and other ecological conservatives and used Ramón's response to justify her argument that the earth was already in trouble because the river had no water, and drilling and fracking would only make this worse. The environmental Discourse led to emotional justifications regarding the project. Ramón emphasized that the city could benefit financially from moving forward with the extraction. He used the personal connection to Hadie's grandpa to try to persuade Hadie to side with his position. He shifted his languaging to code-switch for emphasis and used prosodic exclamations to help make his position clear with his team. Hadie focused on her environmental Discourse and also shifted her languaging to code-switch key words, such as *pollute* and *oil*, to emphasize the detrimental impact that drilling and fracking could have on the community.

Summary

In sum, the first part of this chapter described how the students used their oral language and literacy practices to complete their PBL projects. By using Discourse Analysis (Gee, 2012) to identify how the three languaging interactions identified by Zentella (1997) were used within a thematic rather than linguistic approach, the oral language practices of the students were categorized by on the spot shifts in footing, out of mouth conversational interactions and examples of in the head Discourse organization. The next section of this chapter shows how students used their written language and literacy practices within their WNT classroom. The

section will begin with a focus on writing for state accountability as all the students were subjected to the federally mandated TELPAS test in addition to the State of Texas Assessment and Academic Readiness (STAAR) test. Once the testing was completed, the instructional focus shifted to provide students with several opportunities for self-authoring where they were able to demonstrate their understanding and content knowledge through various written artifacts that they created.

Written Language and Literacy Practices

This section of the chapter will address how the students of WNT used their written language and literacy practices in the context of accountability writing to demonstrate content understanding. Although the students wrote on a daily basis, the writing completed within their classroom could be grouped into three categories: accountability writing, technical writing and authoring. Although the premise of WNT was based on the implementation of PBL, the students still had to demonstrate mastery of the state exams. All the students engaged in the accountability writing tasks because all students were required to complete the TELPAS writing prompts. Because of the emphasis on the state exam, all students also prepared for the STAAR writing assessment by practicing how to analyze fiction and non-fiction. The students willingly complied with all the accountability writing tasks because the students understood that these were practices that had to be completed every year.

The students also engaged in various modes of writing aligned to the content of their PBL units. As they transitioned to the MVP, the students learned about drilling and fracking, a concept that was new to them. The students were tasked to create a presentation that challenged them to include various forms of technical writing about the project that would persuade city council that their position was in the best interest of the city. The final unit of the semester was

The Odyssey by Homer. This unit was the longest project completed by the students, but it provided them with an opportunity to collaboratively author several components of the final project in the form of creative writing. After reading the play, the students were assigned parts such as screen writer, set directors and film crew in order to film their own version of *The Odyssey*. At the end of the year, the students participated in the WNT film festival to view the films they had created. This section will illustrate how the students engaged in technical and creative writing modes as they completed the MVP and *The Odyssey* PBLs lessons.

Accountability Writing

TELPAS writing.

In my first week of data collection, the teachers stopped the regular instruction to administer the Texas English Language Proficiency Assessment System (TELPAS) writing assessment to all the students in the WNT classroom. The federally required TELPAS is designed to use Proficiency Level Descriptors such as beginning, intermediate, advanced and advanced high to measure the linguistic proficiency of second language acquisition in four domains: listening, speaking, reading and writing as alignment to the English Language Proficiency Standards (ELPS) (Chapter 39.027. Texas Education Code, 2013). The federally mandated ELPS, adopted by Texas in 2007-2008 (Educator Guide Texas English Language Proficiency System (TELPAS), 2017) are embedded within the state curriculum with a focus on instruction that provides support to ELLs to help them become proficient in the English language. There are three components to the ELPS:

1. Cross curricular second language acquisition essential knowledge and skills that apply across the curriculum which indicate what an ELL must master to demonstrate English language proficiency.
2. Proficiency level descriptors (beginning, intermediate, advanced and advanced high) are used to describe the proficiency level of ELLs.
3. Linguistic accommodations must be made so that the content area subjects are made accessible to all ELLs.

Throughout the school year at all Texas high schools, the campus Language Proficiency Assessment Committee (LPAC), which includes administrators, teachers and counselors, uses TELPAS data formatively to make informed decisions about the learning trajectory and instructional needs of ELLs. In the spring the TELPAS assessment is administered as a summative assessment for all ELLs. The TELPAS consists of four mini-tests which assess reading, listening and speaking skills while their writing skills are tested holistically and evaluated by teachers trained as TELPAS raters (Educator Guide Texas English Language Proficiency System (TELPAS), 2017). The beginning level questions contain extensive supports to include various pictures for understanding while the advanced high questions contain minimal linguistic supports in an effort to accurately measure language proficiency. The TELPAS mandates that five student writing samples be collected during the school year to be used to measure student writing proficiency. The writing samples are hand written in class by the students, and the students can use their own paper or write on templates created by their teachers. The teachers have the liberty to schedule and administer the writing samples at their convenience within their own classroom as long as the samples are administered within the TELPAS assessment window. TELPAS student writing begins the second Monday of February and ends

the first Friday of April. Once the collection window is closed, the campus TELPAS raters can begin reviewing the student writing samples. Below are the eligible types of TELPAS writing assignment (Chapter 39.027. Texas Education Code, 2013).

- Basic descriptive writing on a personal/familiar topic
- Writing about a familiar process
- Writing that elicits use of past tense
- Personal narratives and reflective pieces
- Expository and other extended writing on a topic from language arts
- Expository or procedural writing from science, mathematics, and social studies

TELPAS writing collections are required to contain

- One assignment about a past event
- At least two writing assignments from the math, science, or SS content area.

I was excited to arrive to the classroom on the day that the students were to start the MVP because this unit had the main components of a PBL unit. In the typical PBL, students were to develop a driving question, and they were to work toward solving a real world problem and these components were evident in the MVP. After ELA took the attendance roll, I anticipated that he would introduce the MVP. Instead he informed the students that they would be completing a TELPAS writing sample before beginning their lesson. What seemed like an interruption in the learning to me did not affect the students at all. They all reached for their backpacks to retrieve their pens while GEO handed out the 26 lined template for them to use to write their sample. As soon as all the students had their paper and pen, ELA asked them to look at him. He wanted to

make sure he had their full attention. Once all eyes were on him, he announced the prompt: *Write about a time you did the wrong thing for the right reason.* This prompt could be a personal narrative or even a personal reflection but it had to be written on a 26 line template issued by the teachers similar to what the students would see on the state exam. Not all the students immediately started to write. I looked over at Jessica, and she was staring up at the ceiling when suddenly she started writing. I looked over at Hadie, Ramón and Ángel and they were all hunched over their papers writing their responses. I saw that some students finished writing and were reading their paper. ELA announced to the students that if they finished, they needed to refrain from talking.

When the teachers noted that all the student had finished writing, they directed the students to complete a second TELPAS writing prompt: *Is it better to be loyal to your family or loyal to the environment* (Field notes, 2/27/17). This writing sample could include a content connection to science or it could be personal reflection, but the prompt was somewhat ambiguous and subject to interpretation so one of the students had a question about the meaning of the word *environment*, while another student asked for clarification about being loyal to the environment. The teachers did not elaborate on the meaning of the word *environment* nor did they elaborate on what it meant to be loyal to the environment. When I first read the prompt, I assumed that being loyal to the environment referred to the earth or the ecosystem of the earth. I wasn't sure how the students would respond to the prompt, so I asked I Ángel if I could read his essay. Considering that he was the only focal student to carry a LEP code, I wanted to read his writing. I was able to clearly understand his writing, but it seemed that Ángel, understood the word *environment* to mean people, such as friends. Although I interpreted environment to mean ecosystem, I wondered if Ángel had a more conceptual interpretation where he considered

environment to mean the surrounding environment to include friends. With the assumption that the environment included his friends, Ángel wrote that it was more important to be loyal to your family. But if the word *environment* referred to the earth or the ecosystem, then that meaning escaped Ángel, and he wrote about choosing loyalty to family over loyalty to friends or peers within the environment. After the TELPAS prompts were collected, the teachers immediately transitioned to the MVP, so I was not able to ask Ángel about his interpretation or perspective regarding the TELPAS writing prompt (see Figure 4.2 below).

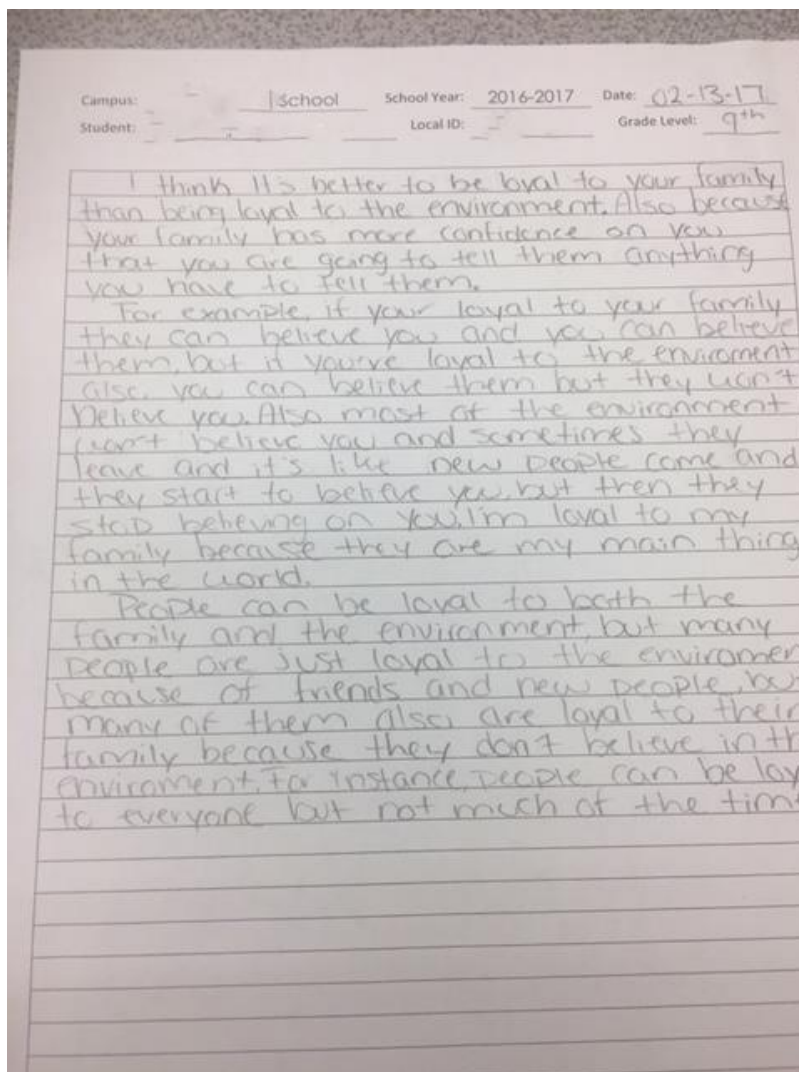


Figure 4.2: Ángel's TELPAS writing sample

Ángel's first sentence clearly stated his position that it was better to be loyal to your family which he followed with a reason stating that because of the confidence with the family, you can "tell them anything you have to tell them." The example that he provided showed he understood the word *environment* to mean friends "...if your [sic] loyal to your family they can believe you and you can believe them, but if you're loyal to the environment also you can believe them but they won't believe you." He referenced the environment as *them* and in the next sentence explained that you cannot be loyal to them because "sometimes they leave" and that if new people come in they won't believe you either. The TELPAS writing sample is submitted to a TELPAS rater to determine writing proficiency. Teachers are trained as raters to evaluate each writing sample holistically to determine the writing proficiency level of the student. Ángel's response demonstrated the organization of this thinking reflected through his writing. He provided a clear statement, followed by a reason with various examples, but clearly the issue that remained was his interpretation of the meaning of the word *environment*. The rater evaluates the writing sample to determine the language proficiency that is either beginning, intermediate, advanced or advanced high. In this case, how Ángel's essay was rated was unknown, but the rater likely recognized that his written response did not reflect that the environment referred to the earth's ecosystem.

The next week as the students were starting to learn more about the MVP project, the teachers stopped the instruction to administer two more TELPAS writing samples. Since the writing prompts were relegated to 26 lines, the students were able to complete each writing sample within 10 minutes and spent no more than 30 minutes when writing two prompts. Since the class was 90 minutes long, the students still had an hour to return to the content instruction. The teachers once again issued the 26 lined paper for the first prompt where the students were to

write about a time they were scared. It almost seemed as if the students enjoyed this prompt because they were able to tell a story. I saw Jessica giggling as she was writing, and she later explained that she was writing about her fear of spiders. This writing prompt captured the students' ability to write in the past tense, and although the students likely enjoyed this prompt, it was unrelated to the MVP content that was interrupted yet again in order to complete the required TELPAS writing samples. Once they finished the first prompt, they were given another sheet of paper with the 26 lines and were to write about one of the following four inventions and explain which would have the greatest effect on the quality of life for humans and why:

- A human organ printer
- An iron man suit
- Driverless car
- The cure for cancer (Field notes, 3/6/17)

Several students asked questions about this topic before beginning their essay. Ramón asked what an organ printer was to which several students nodded their heads to indicate that they didn't know what this was either. GEO explained that 3D printers had been developed that could duplicate organs to help people who were ill. Some students thought about that explanation more while others immediately started writing. Once she completed her TELPAS writing, I asked Jessica if I could read her response (see Figure 4.3).

Campus: _____ Ste-sigh School _____ School Year: 2016-2017 Date: 03-01-17
Student: _____ Local ID: _____ Grade Level: 9th

I think the cure for cancer would have the greatest effect on the quality of life for all humans because thousands of people with cancer will survive and live a long life. Those without cancer can benefit that their loved ones can still be with them longer.

Cure for cancer will have the greatest effect on humans because unfortunately thousand of people, either babies, kids, teenagers, adults, etc have this disease. A cure for cancer can save so many lives and the most important thing they will live longer.

Those without cancer can benefit from the cure of cancer is that their loved ones will be able to stay with them and share more memories together. Families will not suffer no more because their daughter, cousin, brother etc, passed away because of the terrible disease.

The cure for cancer is what many people wish for. Many people have to suffer of cancer day and night. Parents won't even sleep to think that the next day they won't be there with them

Figure 4.3: Jessica's TELPAS writing sample

Unlike the prior example where Ángel expressed a more conceptual view of the TELPAS topic, Jessica understood this prompt and addressed the topic clearly and concisely. She started off with a strong topic sentence that set up the structure of her paper which was why a cure for cancer could have the greatest effect for all humans. Her introductory paragraph also stated that people who do not have cancer will likewise benefit from finding a cure because their loved ones will live longer. She structured her writing by focusing one paragraph on how those afflicted with cancer will benefit from finding a cure while her next paragraph explained how those who do not have cancer could benefit as well by not worrying about sick family members. She ended her essay with a conclusion that re-stated how people wished for a cure so that their family would not be affected. Again, how Jessica's writing was evaluated by the rater was unknown, but in this sample she clearly demonstrated that she could proficiently communicate using her writing skills. The writing samples were collected throughout the year until the students completed the five writing samples that were submitted for evaluation to the TELPAS raters.

After they finished their TELPAS writing, I asked Jessica how she felt about the writing samples they had to complete. She didn't say either way how she felt; she only shrugged her shoulders. I then asked Hadie, how she felt about the TELPAS writing prompts, and she simply said, "They're easy" (Field notes, 2/27/17). I never heard a student complain about completing the TELPAS prompts maybe because they had done them every year, until they faced deadline pressures to complete the MVP project and felt that the time spent on the TELPAS prompts could have been used to work on their projects. Even then, their complaint were not that they didn't want to complete the TELPAS writing samples, but they would have wanted more to complete their projects.

While it seemed that some of the TELPAS writing prompts were somewhat enjoyable for the students, the preparation for the STAAR exam seemed to carry more pressure for the teachers and the students. Because the district and school were working toward improving their academic performance, it was important that the students tested positively to avoid being placed on the state's *Improvement Required* list. In order to master the tested objectives, the instructional focus of WNT was based on PBL with a concentration on critical thinking that integrated reading and writing rather than emphasizing basic *kill and drill* test preparation. Despite the PBL focus, the week before the state exam the teachers paused the PBL work that the students were doing to finalize their MVP to ensure that the students not only understood the format of the state test, but also practiced strategies to help them successfully pass the exam.

STAAR testing.

The spring is testing season in Texas. The nature of teaching in Texas means that all professional employees are accountable to show positive student gains on standardized testing (*Commissioner's Rules Concerning Educator Standards*, 2007-2018). Both ELA and GEO mentioned to me that they would often spend entire weekends working together to not only plan their PBLs, but to also design lessons that would ensure the students of WNT would be prepared for the state assessment. It was the third week in March, and I entered the classroom to much laughter and excitement as the students were playing a game. I suddenly realized that it was not a typical game for fun, but a game to help them prepare for the STAAR exam that is generally administered the last week in March. I looked for my four focal students and saw that they were on separate teams. All the students were facing the interactive board on ELA's side of the classroom. Jessica was sitting up front on the right side with her team while Hadie was sitting with another team close to the back of the room on the left side. Ramón and Ángel were on the

same team seated on the right side near the middle of the classroom. ELA projected a sentence onto the board. Members of the teams apparently were taking turns answering the questions. After reading the posted sentence, the team member assigned to answer was to write their answer down on a sheet of paper and take it to GEO. After reading all the responses, GEO tabulated one point for every correct answer for each team on a grid that he created on the board. Wrong answers were not included in the tabulation so the teams with the most points were “winning.” After each question, the teachers explained to the students why a certain answer was correct and why the others were wrong. With every new sentence projected, the classroom became completely quiet as students were reading the statement then suddenly followed by furious scratching on paper as students quickly wrote out their answers.

The game advanced to the lightening round where each team could earn six points on the next two questions. The teams were asked to conference and choose one player to represent their team that they felt would likely get the right answer. The right half of the room would answer the first question and the left half would answer the next question. Ramón was immediately chosen by his team as their representative, and he proudly walked up to the board clapping his hands together to indicate that he was ready. I looked back at Ramón’s team to see Ángel looking very relaxed with his legs crossed on his chair as he watched the other team members go up to participate in the lightening round. All the team representatives were standing up in front of the board as ELA read the projected question. The students immediately wrote their responses on a sheet of paper and submitted their answers to GEO. After reading each response, GEO would add six points next to the team name if they got it right. Ramón handed GEO his response, and it seemed like GEO took longer than usual to read his answer possibly due to Ramón’s penmanship, but then GEO turned around and added the six points to Ramón’s team

which resulted in cheers and high fives. The first group of students sat down and the next group of selected team members walked up to the board that included Hadie and Jessica. Ramón was now watching as he sat on his chair with his feet on the chair in front of him looking like he was lounging by the pool. The question was posted, the teams submitted their answers, and now three teams were tied with 18 points each. ELA asked the students to decide whether they wanted one winner or three winners. The students talked softly amongst one another, but no one offered an answer. Ultimately, GEO they asked me if we should have one winner or three. Frankly I was surprised and proud to even be included in the fun. The prize was chocolate candies so I stated that we should have three winners so that more could enjoy the chocolate.

As GEO was distributing the prizes, I looked up to see that all students, not just the winning teams, were receiving a piece of chocolate. The sweet treats may have minimized the stress that the teachers and students were feeling that day, but the importance of the test was palpable since Wilson High School needed to show student gains in order to meet the state accountability measures. Many of the questions posed to the students in this game focused on the objective of revising and editing. ELA explained to the students that this objective required them to read for errors in spelling, punctuation and grammar and often because the students would not find any spelling errors, they assumed the sentence was correct. With every sentence projected, the students had to correctly write out the sentence and demonstrate that they could revise and edit to demonstrate mastery on the state exam and better yet, apply this skill in their writing.

The next day, I walked in the classroom to see that once again the group configuration had changed. Ramón and Ángel were paired together with two other girls, while Hadie was sitting with one group and Jessica was assigned to another. ELA announced that for the next

assignment they were to refer to their copy of the district common assessment that they took in the fall. ELA directed them to page 22 to an article about the late great Tennessee Vols' girls' basketball coach, Pat Summit. "Look at how this article is written. First of all, is it fiction or non-fiction?" ELA asked the class. The students correctly respond that the article was non-fiction. ELA continued, "Write that down in top right hand corner of your reading passage." ELA's focus was on teaching the students to identify the type of text along with its intent so that they could then effectively analyze the article. He then directed the students to write the following components on the top right corner of their paper:

1. Thesis
2. Organization (Shifts)
3. Evidence
4. Author's purpose

The students were then directed to read the article and then identify and write out the thesis statement of the article, explain how the article was organized, what evidence was presented to support the thesis statement and finally what was the purpose of the author. I looked over at Jessica and saw she was reading with her highlighter in hand. Both ELA and GEO were walking from table to table to reading the analyses that the students were writing, correcting some of the papers they read and praising others for their keen analysis. After the teachers had reviewed the analyses of the Pat Summit article and were satisfied that the students correctly analyzed the article, they moved on to the next excerpt. The students were directed to find in their copy of the common assessment a passage from *The Namesake*, a novel written by Jhumpa Lahiri. After the collective shuffling of pages, all the students found the article, and ELA directed them once again to the following literary components in the top right corner of their paper:

1. Characters
2. Conflict

3. Figurative language
4. Theme (life lesson)

As they did before, they had to identify whether the article was fiction or non-fiction. After identifying that this was a piece of fiction, ELA explained to them that in order to fully analyze the article, they needed to identify all the character, explain the various conflicts, describe the use of figurative language and identify the theme of the piece. He directed the students to read the story and then write out the analysis focusing on the components to analyze a work of fiction. I looked over at Ángel's article, and he had written the components in the top right corner as directed by ELA. Like Jessica, he was reading with a highlighter in his hand when ELA came over to their table to check on their progress. Although Ángel showed evidence of reading as his text was highlighted, Ramón had not even begun the assignment. ELA looked frustrated, "Come on, guys! If I asked you what this is about, what would you say?"

One of the girls responded quickly by saying, "It's about life problems."

ELA smiled, "Yes, great connection!" He continued and then asked the group, "What else can you tell me about *The Namesake*? Read through it and find out if there is any way that you can connect to this story." At this point, the bell was getting ready to ring so the students were instructed to write out their analysis of *The Namesake* at home and submit it electronically on their Echo website by midnight. (Field notes, 3/23/17). The goal for the teachers was to have the students approach the literary analysis with some kind of structure. If the students used the literary components to analyze fiction and non-fiction as instructed, they could demonstrate not only critical thinking but organization in their written argument to demonstrate effective communication through writing.

Reflections on state testing.

It seemed that the test preparation was slow moving compared to the fast paced group work that the students were used to doing. Before they started their test preparation, the students were frantically writing out the text for their presentations to city council for the MVP. I wondered if the break to prepare for the test was a relief or if it simply added more stress and frustration to an already tight deadline. At the end of the school year, I asked selected students to participate in a focus group discussion to reflect on how they felt when they were directed to stop working on their MVP presentation to prepare for the state exam.

- 1 NP: How did you feel when your teachers said, “We're stopping because we need to prepare for STAAR?”
- 2 Melanie: That was a bummer to most of us because we already knew we needed to get this [presentation] done by today and because tomorrow we can't work on it,
- 3 so pausing the time just made us have to re-schedule everything we needed to do.
- 4 Some of us had to stay after school to finish the stuff that we had to do during the time that was taken away from us during benchmark [test] preparations.
- 5 I think it was for our own good because due to that, the last minute preparations, the teachers did save a lot of students who would not have passed.
- 6 Anuel: It didn't matter because they were helping us pass the test.
- 7 Alice: I thought it was both beneficial and a bad thing to do
- 8 because the benefits were that we were going to pass the test, but the well, there's pros and cons. That was a pro,
- 9 but the con was that like she said we made deadlines for ourselves so that we could have specific times in order to finish what we need to do
- 10 That kind of altered our plans and we weren't allowed to do what we wanted to do, and
- 11 sometimes you forget what you wanted to do because you start worrying about another thing and that goes out of your mind already.

- 12 Jessica: Preparing us for STAAR shortened the time of doing the project,
13 and I got more stressed.
14 I know it was better for me because they were preparing me for STAAR. (Focus group interview, 5/31/17).

Although the students described feeling the pressure of time constraints to finish their project, they justified the interruption to their instruction. Although in line 2 Melanie expressed that their work “had to be done by today,” the students also did not question the interruption as referenced by Anuel in line 6, “It didn't matter because they were helping us pass the test” and by Jessica in line 12 “I know it was better for me because they were preparing me for STAAR.” The importance of passing the test almost superseded the need to complete their PBL tasks and only Alice expressed that there were two perspectives regarding the issue of interrupting the instruction in lines 8, 9 when she referenced the pros and cons to stopping the project to prepare for the test. She emphasized that they needed to prepare for the test, but at the same time it negatively affected the work they were doing with their PBL and as Jessica stated shortened the time they were given to finish their project. The interruption may not have seemed so impactful had the students been able to practice their writing based on prompts related to their MVP project so that the content could be reinforced while honing their writing ability. Instead, they prepared for the state assessment with out of context readings, however interesting, that essentially were not connected to the real world writing they were doing as part of the MVP. The workbooks used to prepare the students for the state exam were designed to mirror the reading passages and writing prompts similar to what the students would see on the test. The teachers could have taken time from their lesson planning to design and create test preparation passages and prompts to reflect the authentic content of the PBLs. Because of the abundance of so many ready-made

test preparation work books, it was likely much easier for the teachers to use the prepared testing workbooks.

Extrinsic vs intrinsic motivation.

ELA and GEO continued to work with multi-faceted instructional lesson plans that included making sure the students had completed all the required TELPAS writing samples, plus reviewing high stakes objectives from the state exam that had shown to be low performing in the past along with scheduling time for the students to continue to work on their MVP project. The writing that the students completed for TELPAS was to specifically demonstrate that the students could write using various modes such as past tense writing or a personal narrative. The writing that was required of the students for the STAAR exam seemed to focus more on recognizing proper sentence structures and patterns through revising and editing. Additionally for the STAAR writing component, the students also practiced writing a literary analysis for both fiction and non-fiction so that they could demonstrate content understanding through their written proficiency. The accountability writing that the students completed to prepare for the state exam was usually disconnected from the content that they were learning. As interesting as the passages were on the life of Pat Summit or from *The Namesake*, the students struggled to make deep connections to the readings. When the students were assigned to read about the life of Pat Summit, one of the boys sitting at my table asked if Pat was a boy or a girl (Field notes, 3/23/17). The other three students looked up at me waiting for an answer, so it was clear to me that they really had never heard of Pat Summit. When they read the passage from *The Namesake*, I told the students at my table that the book had been made into a movie. When I asked the students if they had heard of the movie, no one responded except Jessica who shook her head no, shrugged her shoulders and then continued writing her literary analysis. If the passages had been related to

drilling and fracking, the students may have taken a more focused approach because they may have been able to use these writing samples within their persuasive presentation to city council. Because I did not see a deep connection between the reading and the writing, the tasks seemed somewhat methodical and even rote as the students seemed to go complete several of the tasks to finish the assignment without truly delving into the content. One of the criteria for PBL instruction is that the unit should have a real world connection to generate authentic student engagement and motivation (J. Larmer, 2016). When the students worked on their PBL projects, their writing purpose was very clear so they struggled very little to complete their tasks. After reading *The Colour of Love*, the students were to write their own love biography knowing that others would read what they wrote in an effort to find their “match” (Field notes, 2/24/17) so they carefully described what they were looking for in a partner. After they learned about drilling and fracking, the students had to write whether or not they supported extracting the oil because their goal was to persuade city council to adopt their position. When they analyzed the passage on Pat Summit or *The Namesake*, they followed through with the directions issued by their teachers, but lacked an intrinsic connection to the writing task because they were unfamiliar with the content. Their extrinsic connection to the accountability writing was based primarily on passing a state exam. This extrinsic motivation was enough to have the students complete the writing tasks as assigned, but a disconnect between purposeful writing and a genuine incentive to complete the writing task was not evident through accountability writing.

Technical Writing

As previously stated, the Mountain Vista PBL led to a real world presentation to the members of city council where the students were to present a technical persuasive argument that showed why the city should or should not proceed with the project. Because the MVP contained

components that were foreign to them such as drilling and fracking, the students were required to do an extensive amount of research to understand the various aspects of the project. For the R&J project, the students had completed writing assignments like their love biography that provided them with the opportunity to creatively use descriptive language, but the MVP required the students to technical writing more than creative writing. The technical writing that was required in the MVP differed from the creative writing of the R&J and *The Odyssey* units and from the academic writing of TELPAS and STAAR. I used the definition of technical writing based on the research conducted by Rus (2015) as writing that was based on practicality and functionality. In the 80's many assumed that the efficiency of the Asian countries was due to the fact that they trained their work force to contribute to an industrialized and technical economy (Gee, 2012). Prompted by *A Nation at Risk* to reform the country's educational system, the US recognized the importance of including technical reading and writing in our schools (*A Nation at Risk: The Imperative for Educational Reform*, 1983). Effective technical writing was geared toward a specific audience where the purpose was clear and concise. Avoiding superfluous wording and implementing effective word choice would lead to the content vocabulary of technical writing avoided superfluous wording yet exemplified brevity with the use of efficient word choices (Rus, 2015).

Mountain Vista poster.

The teachers introduced the students to the MVP unit by giving each student and copy of the entry document and reading it to the entire class. In the entry document, the city council informed the students that an oil reservoir had been discovered in the neighboring county, and they requested student input to help the city decide whether or not to proceed with the process of extracting the oil. The teachers sent the students an article to their WNT website about a

company named Torchlight Energy that was interested in completing this project. After they read the article to themselves, the students prepared to write their first technical paper. Using their own paper and working within their student teams, the students were tasked to identify the key pieces of information proposed by Torchlight about drilling and fracking. Guiding the students, the teachers informed them to re-read the article to carefully identify crucial components such as who, what when where and why so that they could understand the main factors of the proposal by Torchlight. Once each student re-read the article and wrote out their notes identifying the key components of the article, the teams were to discuss and compare their findings with their tablemates. There was little to no discussion as the focal students readily came to a consensus regarding each component of the article with the exception of why Torchlight proposed the project. GEO then announced to the class that each team needed to transfer the key components they identified on to a poster. GEO explained that the students would be creating a graphic organizer listing the *who*, *what*, *when*, *where*, *why* and *how* that each team identified from the article (Field notes, 3/1/17). Hadie, as the task manager, quickly walked over to the supply table to secure a sheet of chart paper and the markers to complete their graphic organizer.

- 1 NP: So what do you have to do with your poster?
- 2 Jessica: We have to write who, what, when where and why.
- 3 Hadie folds the chart paper to start working on the poster.
- 4 Hadie: Ok what we need to do here is write who, what, when, where and why
- 5 Ángel: *Grande, grande*. "Bigger, bigger."

Jessica grabbed the markers and directed Hadie to write Who, What, When Where, Why and How on the side of the chart paper in pink and then told her that the answers should be in green.

Jessica pulled out her notebook and starting to create what looked like her own version of the graphic organizer and asked confirmation from her team, *¿Cómo se llama? Torchlight?* “What is the name of the company? Torchlight? (Field notes 3/1/17). We heard GEO announce that the students had three minutes to complete their project. Hadie started to transfer the information she had written from her notes onto the chart paper as her teammates looked on to what she was writing, but they still did not have information on why this project was being done. As the students read the information they were listing on their graphic organizer, Hadie asked, “What exactly is fracking?” No one answered. They readily agreed on all the other components of the graphic organizer indicating content understanding, but the concept of fracking was new and foreign to them yet critical to the process of extracting the oil and completing the project. I directed them to go back to their article to identify the definition of fracking provided by Torchlight so that they could complete their graphic organizer. After re-reading the article, Hadie looked over at me and said, “Fracking is just using water to break the earth? (Field notes, 3/1/17)” I clarified that the water was so highly pressurized that it would break up large pieces of rock to allow the extraction of the oil. ELA then walked up to their table to check on their progress and quickly saw that they had not listed *why* and offered some clarification to help them complete their assignment.

- 1 ELA: What are they [Torchlight] doing?
- 2 Hadie: They are drilling for oil because they want to make more money.
- 3 ELA nodded in agreement: That’s the “why”! Good – we’re making connections now. This chart is a summary of this project. Don’t be afraid to ask for help, really (Field notes 3/1/17).

The students were almost done with their chart, but were still missing a start date for the company. The article mentioned that Torchlight Energy started trading on the NASDAQ in

2013, but Jessica noted that the article was written in 2015 and wondered if that was the date the company started. GEO walked over and explained that the date of the article was not the date when the company was started. ELA announced that he needed a team member that was not the norms manager or the task manager to approach his desk. Since Ramón was absent on this day, Ángel quickly grabbed his notebook to go meet with ELA. The girls continued to work on the poster and posted their completed project (see Figure 4.4).

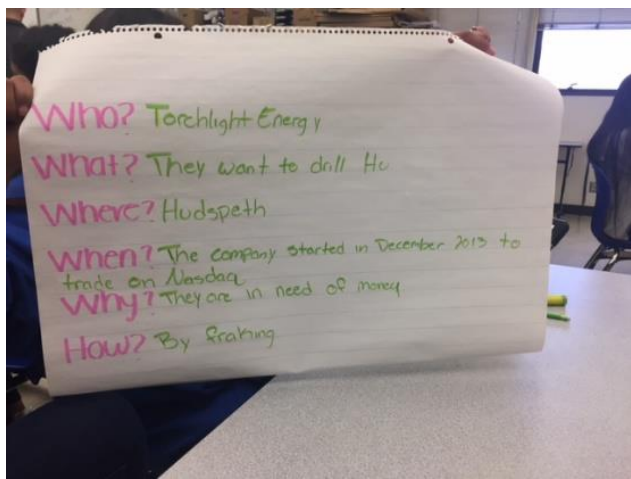


Figure 4.4: Who, what, when, where, why, how

This poster identified the main components of Torchlight's proposal to extract the oil. The students were use the information from the article to help them determine their team's position as to whether or not the city should move forward to extract the oil. So the information on the poster was the foundation of what would become their proposal to the city council. The day's agenda stated that as soon as they finished the poster, they were to read another article about drilling and fracking and answer the questions posted on their echo webpage.

Graphic organizers.

The girls were starting to read the next article when ELA dismissed the team members that were meeting with him. Ángel walked over quickly to the table and spread out the documents given to him by ELA to show this team. ELA had reviewed each graphic organizer with the team representatives to ensure that the students understood what they needed to do so that they could explain the task to their team. Ángel explained that they had to create another graphic organizer showing the advantages and disadvantages to drilling and fracking. He showed his team samples of various graphic organizers that they could use (see Figure 4.5) and started to explain each one to the girls.

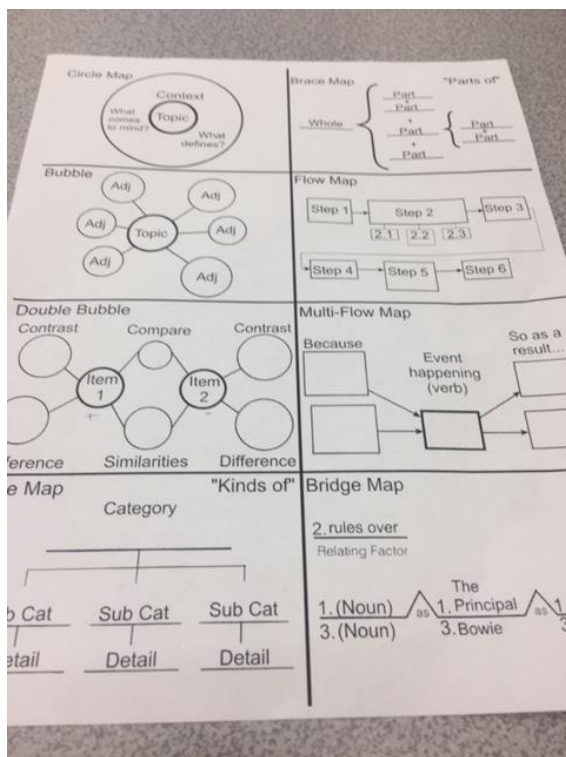


Figure 4.5: Graphic organizers

- 1 NP: So this is what you need to do?
- 2 Ángel: Write a positive item then a negative one.
- 3 NP: Very nice
- 4 Ángel: Then we talk about nature too.

Meanwhile, the girls were both working together on answering the questions based on their second reading assignment. Each of the girls had taken notes and Hadie was ready to help Jessica, who was the scribe, to write out their responses to the questions. GEO walked up to the table to check on their progress.

- 1 Hadie: So how is this going to help us in our presentation?
- 2 GEO: Torchlight wants to drill in our area to extract and sell the oil they recover.
- 3 By being able to explain what the company does, then city council will know that you know what you are talking about.
- 4 Collect your information and then you present your evidence... Do some research on how this affects you.
- 5 We don't want all the groups presenting the same information (Field notes, 3/1/17).

This exchange was very important for the team because it justified why they were doing so much research. The real world aspect of the PBL was now very visible. Based on the information they collected, they needed to develop a solid argument to show city council that not only had they fully researched the issue, their proposal to proceed with the drilling and fracking was clearly in the best interest of the city for several reasons. Hadie was still undecided about supporting the project, but it was clear that they needed to continue reading and researching to make sure they collected clear evidence of their position.

By the following Monday, the team finished their bubble map graphic organizer showing the positives and negatives to drilling and fracking and Jessica had drawn a map of the proposed drilling site. The team needed to come to a solid consensus on their position and now had to write out their PowerPoint presentation explicitly stating their position by Friday. ELA explained what they needed to do to successfully present their position on Friday.

ELA stated:

On Friday, you will be presenting and this is part of real world applications.

These folks may even hire you. Plus or minus, this is the real world. Today, talk to your group, how can your presentation be different? How can you stand out?

Be memorable, be informed, and be persuasive. Use a PowerPoint, but break from the PowerPoint then do something creative (Field notes, 3/6/17).

The MVP presentation.

On their Echo webpage, the agenda for the day stated that the student teams were to include practical information in the introduction of their PowerPoint listing data such as the location of the drilling site, the size of the area that would be used for the project, descriptions of the surrounding environment and wildlife along with basic information about the drilling company and procedures. They also needed to include a slide early in the presentation that clearly stated their team's position along with the reasons supporting their position. Hadie informed the team that by the end of the day, they needed to write out a team plan about the order of their presentation and exactly what information they would be including in their PowerPoint. The students had a lengthy discussion about how they could engage the members of city council in some kind of activity but could not agree on how to do that, so they decided to continue focusing on the PowerPoint. After much discussion, Hadie agreed to support the

drilling and fracking and Ramón and Ángel agreed to start working on the PowerPoint. The PowerPoint was a good example of technical writing as the slides not only showed the team's position to advocate for the project moving forward, but the slides also showed functional details pertinent to the project including illustrations of the proposed drilling site in square miles and surrounding areas for easy reference by city council. The team also included a slide that described possible wildlife living in the proposed drilling area in addition to providing population numbers of neighboring cities. Hadie directed Ramón to find images that the team could use in their PowerPoint. They needed an image for their introduction, a photo of the proposed area, images of wildlife and neighboring cities, along with any images showing an economically thriving city. He immediately grabbed his tablet and started to search for the perfect images while the girls were working on organizing the other components of the presentation.

Their presentation was starting to look like a completed project until Ramón and Hadie announced to their team that they would be absent on Friday and would miss the presentation. The next week was Spring Break, so Hadie stated that her family was going out of town on Thursday and Ramón said his family would leave to Puerto Peñasco on Friday. Several of the presentation components were almost completed including the bubble map showing the benefits of drilling and fracking, the map of the proposed drilling site and the PowerPoint presentation itself, but having two of the four members absent on the day of the presentation could severely impact the outcome of the project. The presentation was scheduled for Friday, and on Wednesday before the presentation, the team wrote out what Ángel and Jessica would need to do for the presentation. On Thursday before the actual presentation, ELA and GEO informed the students that they would be able to practice their presentation with a WNT faculty member who

would provide them with constructive feedback. The teacher assigned to listen to the focal team's presentation was the WNT algebra teacher. The order of the presentation had been finalized, and the students were ready to receive constructive feedback. Ramón still had not informed the teachers that he would be absent on Friday. Although the presentation was finalized, there was still some anxiety as Jessica and Ángel were even quieter than usual knowing they would have to carry the burden of the presentation.

When the WNT teacher entered the room, the students quickly organized their presentation information for the practice. The students explained to the WNT Algebra teacher that they would begin by introducing themselves to the city council members, then Ramón would present the PowerPoint presentation. After the PowerPoint, Jessica would then show city council a map of the proposed drilling site. The team would then engage city council in some sort of activity which they had yet to agree on. After the activity, Ángel would then show a graphic organizer listing the benefits to the city of retrieving the oil followed by the team's conclusion which included any possible questions from city council. Their practice was delivered without incident by Ramón who was not going to be in class on Friday for the presentation. Nonetheless, the WNT math teacher suggested to the team that they needed to include some kind of graph showing a potential profit margin should the city invest in the oil. She also suggested that they color their posters to make them more appealing, although Ramón challenged every suggestion. The suggestions made by the WNT teacher were valid points as the graph would add concrete data regarding their profit margin. Her suggestion to color the posters would only make them more appealing. Ramón led the practice presentation, so he may have felt that the suggestions of the teacher were a criticism against him. As an observer, I felt that the students had a good presentation, and they were one of the few teams to promote moving forward with drilling and

fracking. It seemed that Ramón's loud and defensive position may have reflected the fact that he believed their position as a team was valid, and he wanted to make sure that the WNT algebra teacher and his team mates understood that. ELA heard Ramón's passionate defense of his project, and he walked over to the table, "Everything ok over here?" Suddenly, Jessica announced to him that Ramón would be absent for the presentation. ELA's mouth dropped, and he looked over to Ramón who suddenly announced, "Ok, I will be here" (3/9/17). His stunning announcement caught ELA by surprise who was still wide eyed and essentially speechless. Ramón explained that his family was going on vacation, but he would work it out to stay for the presentation. Jessica simply emitted a nervous giggle very likely relieved from the pressure she was feeling.

On the day of the presentation, the WNT classroom was transformed into a board room. Three city council members were seated at tables facing the presentation board close to ELA's desk. The tables behind them were replaced with rows of chairs to simulate city council's board room. The teachers brought in one team at a time to present to city council. When the focal team was called in, the students quickly started posting their charts and maps on the presentation board. Ángel posted a new and more colorful bubble map showing the positives of drilling for oil, while Jessica posted a map of the proposed site along with a graph showing a potential profit margin. As practiced, they introduced themselves by shaking hands with all the members of city council before Ramón introduced the project and acted as a narrator throughout the presentation. Ramón used Standard English to explain all the technical aspects of the PowerPoint which included descriptions of the proposed area, wildlife and neighboring populations. At the completion of the PowerPoint, Ramón transitioned without incident to Jessica and Ángel who described their maps and charts showing the benefits of extracting the oil. After Ángel presented

his bubble map showing the benefits to the city of retrieving the oil, Ramón explained that they wanted to simulate how by investing in the recovered oil, the city could potentially make money from this project. I had not yet seen the activity to which they agreed to include in their presentation, so I was anxious to see what they decided to do. With Ramón as the lead, the team engaged the city council members by simulating a transaction where the city could buy oil and potentially double their investment. Ramón created fake dollar bills which he distributed to the members of city council and used a vial of olive oil to represent the oil that would be extracted. He offered to sell the oil to city council at a price of \$10 a share. Two of the three members of city council picked up their “money” and offered to pay him the \$10. Before finalizing the simulated transaction, he explained to them that the value of their oil could double, and if they purchased the oil for \$10 a share, they could ultimately sell their investment for \$20 a share making a significant profit (Field notes, 3/10/17). The city council members watched Ramón’s every move as they listened intently to his proposal, and fortunately no one asked what would happen if the value of the shares would drop rather than increase. The presentation ended with Ramón offering to answer any question to which they had none. Each of the students thanked city council for listening to their program.

The presentation to city council emphasized the real world component of this project. The writing that the students completed for this PBL was very technical based on a subject that was essentially foreign to them. They had to read and research information regarding drilling and fracking and include practical information in their presentation such as facts, figures, dates and evidence to support their position. The students of WNT were given the opportunity to learn to express themselves persuasively through the implementation of technical writing. The next section describes how the students learned to express themselves through self-authoring.

Authoring

The love biography.

During the R&J unit, the students wrote throughout the project. Given that the language of Shakespeare was new and different to the students, the teachers employed several methods to check for understanding from comprehension tests sent to the students' Echo webpage to having the students re-write scenes in their own words to writing a script for a puppet show based on one of the scenes. One of the writing activities that the students enjoyed, which happened to coincide around Valentine's Day, was writing a love biography. As I walk into the classroom, I immediately noticed that the class was separated with boys on one side and girls on the other. There were more boys than girls - 24 boys, 16 girls, 2 students were absent. The dynamic of separating the boys from the girls was very interesting. The din in the classroom was much like a constant hum. As I looked around the room, I noticed that the girls were more on task than the boys. I saw the girls hunched over their tables working on their assignments while the boys were leaning back in their chairs laughing and talking to each other. I noticed that Oscar and Ángel were sitting together so I went to join them. The teachers introduced this unit by playing *What is Love* by Haddaway and having the students read six anonymous love biographies written by the WNT faculty that were identified only by a number. Several students giggled as they read what their teachers had written about the type of love they valued and the type of love they were looking for. The love biographies seemed to humanize their usually stoic teachers, and ELA explained that the point of the biography was to show the students that they could also easily express themselves through writing. ELA informed the students that after reading each love biography, they had to try to identify the author of each biography. The students laughed as they tried to match the biography to their teachers and were given the opportunity to question some of

the teachers who came into the class to help the students solve this puzzle. After the students read their teachers' love biographies, ELA asked the students to write their own definition of love on a Valentine's Day template created by the teachers. Several of the students had a blank stare on their face because unlike Romeo and Juliet, many of them had very likely not yet experienced love. ELA explained that the students were to write their own love biography and describe their love type based on *The Colours of Love* (Lee, 1973). He told them to make sure they wrote about what kind of love they valued and what type of love they were looking for and to include anecdotal evidence that supported their description. Lee's work argued that love was illusive because it was confounded with lust. ELA explained to the students that R&J was about loving deeply and more than a physical attraction between R&J. By studying the different types of love, ELA explained that the students could help themselves and possibly help others to find the true meaning of love (Field notes, 2/13/17). ELA directed the students to re-read *The Colours of Love* to familiarize themselves with the love types before writing their love biography. The student groups started reading and discussing the various love types and talking amongst each other as they identified their love type. ELA reminded the students that their love biography would be anonymous and coded by numbers assigned by the teachers, so he wanted them to write freely. The writing process itself was completed quickly. I saw some of the girls reading and revising their biographies, but I did not see any of the boys editing their work. Ramón was listening to his head phone most of the time instead of writing. When ELA announced that they were going to post their love biography in two minutes, suddenly Ramón grabbed the Valentine template and quickly started scribbling on the paper. When ELA announced that time was up, Ramón was done. Once the students finished with their writing, ELA explain to the students that they would post their love biographies on opposite ends of the

classroom. When given the signal by ELA, the boys would go to the board near ELA's desk and post their love biography, while the girls would go to the opposite side of the classroom near GEO's desk and post their biography on the board. The students were quiet as they clutched their papers tightly in their hands. ELA looked around the room and said, "Ready? Go!" The noise level rose immediately and you could hear tape being torn, laughter, giggling then suddenly the noise level was dropping as the students returned to their seats. GEO and ELA quickly inspected the posted papers, then ELA told the students to walk to the opposite end of the classroom so that they could read the biographies and find their love match. The boys walked over to the girls' posts, but the girls ran to read the boys' posts. Once the students found their love match, they were to take down the love biography and turn it in to one of the teachers (see Figure 4.6).



Figure 4.6: Posted love biographies

The students enjoyed reading their love biographies as they laughed and giggled throughout the process. As the bell rang to transition to the next class, I heard one of the girls say, “Who would have thought that these boys could be so in touch with their feelings?” (Field notes, 2/24/17). The activity allowed them to think about what type of love was important to them, but it also allowed the students to learn more about their peers however anonymously. I was so impressed that Ramón was able to write his paper in less than two minutes, so I asked him if I could take a picture of his love biography (see Figure 4.7).

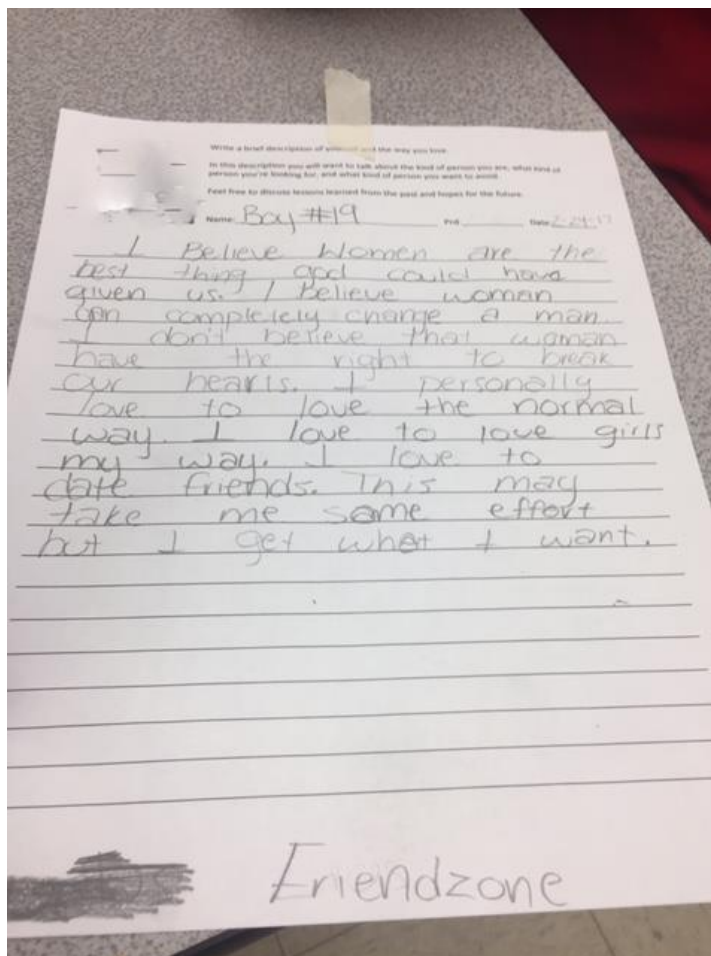


Figure 4.7: Ramón’s love biography

Ramón's writing was very clear and easy to understand. He started off with several statements that showed his beliefs primarily that women were the "best thing god [sic] could have given us" along with stating that he believed that women could change a man even though they don't have the right to break men's hearts. He then wrote about how he wanted to love others. He stated that he wanted to love the "normal" way and only clarified it by stating that he wanted to love "my way" indicating that his love style might be Pragma who feels like a master and finds love based on their needs (Field notes, 2/24/17). He indicated that his style of loving might be difficult to do, but he stated that he would work to get what he wants. Although he clearly described what he believed and what he liked, he failed to identify his love type based on *Colours of Love* although on the bottom of his paper he wrote "Friend zone" to indicate that although this is what he believed, he was only looking for a friend or he could have just scribbled this on the bottom of his paper. Zentella (1997) informed us that intentional verbal interactions where a speaker expressed knowledge and/or shared values with the purpose of anticipating a response from the interlocutor or interactant was indicative of an in the head exchange. Because Ramón wanted to make sure that no one misinterpreted that he might be looking for a girlfriend, hence the "Friend zone" comment, his writing could be aligned to an in the head written exchange. His love biography satisfied the written task assigned by ELA, but he wrote very intentionally so that the reader could see that he only wanted to be friends and nothing more. But the writing task as assigned was an in the head written activity as all the students wrote their love biography knowing based on how much they wanted to share, responses would be drawn from their peers. By giving the students the liberty to write anonymously, they could write to elicit any kind of responses from their peers based on the content of their love biography.

ELA announced to the students that on the WNT Facebook page they would post who wrote what if students wanted to reveal their identity. GEO added, “You can write I am homeboy #3. You can do stuff like that” (Field notes, 2/24/17) to encourage the student to engage online. The students were still talking about the love biographies they read that many of them may not have heard the announcement regarding the Facebook page. I checked the WNT Facebook page that night and found that the identities of the WNT teacher love biographies had been revealed. The teachers posted by number which student biographies were most popular but only a couple of students volunteered their identity. This was an activity that engaged the students in the writing process based on the themes of a content unit and based on a popular social holiday. The anonymous posting of the love biography encouraged the students to express themselves freely and their official grade was a participation grade where they were not penalizing them for spelling or grammatical errors.

Creative writing for *The Odyssey*.

The students stated to me at the end of the year that *The Odyssey* was their favorite project. The difference between this project and the other projects was that the teams were divided into two large groups rather than in small groups of four. Because of the large groups, the students were able to interact with many more people to complete the various tasks of this PBL lesson. Since they were creating a film, the students were able to use their own individual approaches to complete tasks such as drawing the characters from the play or designing their interpretation of a character’s clothing. In the MVP, although several students said they liked presenting to city council, the type of writing they did was more technical and functional based on their research on drilling and fracking. *The Odyssey* PBL project was a two month project that took them to the end of the year, and it was the longest unit that the students completed.

Because everyone was assigned various tasks and multiple jobs in order to complete the film, the time seemed to move quickly to the point that the students were rushing to ensure they would complete their film before the end of the school year.

The teachers introduced the project to the students by explaining that together, they would read 15 chapters of *The Odyssey*. The teachers provided the students with abridged versions of each of the 15 chapters that the students read all the chapters in class. The teachers used various approaches in reading the 15 chapters. Sometimes the teachers read to the students using their best animated voices, or the teachers assigned students to read out loud or there were days when the students read silently to themselves. Similar to the R&J unit, the teachers created study guides to be completed by the students in class to check for understanding and comprehension. It took the students about six week to finish reading all 15 chapters, then they were divided up into two teams – one team for ELA and the other team for GEO. The PBL task was that the students were to create an original film version of *The Odyssey* and at the end of the year, both teams would show their films and the winning film would receive a prize from Netflix. The first order of business was to designate one team as *old school*, meaning they would maintain the features and costumes of the period of the play such as olive branches and togas while the other group would be the *new school* team modernizing the story to reflect a present day approach. After some discussion, the students agreed that ELA's team would be the old school team focusing on Season 1, chapters 1 – 8 while GEO's team would be the new school team concentrating on Season 2, chapters 9 - 15. I decided to follow GEO's team for this project since Hadie, Jessica and Ángel were on this team. Once the students were broken up into teams, GEO emphasized once again that their goal was to plan and create a film depicting their assigned chapters, and he informed the students that within both teams, all the students would have to

select a job. The jobs from which the students could choose included director, set designer, costume designer, script writer, film crew, editor, and they would need to multi-task and participate in various acting roles. The director would make sure that the filming and daily tasks were completed according to the filming schedule. The students discussed amongst each other jobs that they might enjoy, and the new school team felt that Hadie and another girl named Alice would be good co-directors for their team. Ángel decided to be a costume designer along with three other boys, and they were in charge of finding props for the characters, while students who chose to be set directors, like Jessica, who were in charge of finding places on campus to film their scenes. Each team also had a team of writers who were in charge of taking the assigned chapters and converting them into scripts for the actors. Students who were somewhat tech savvy worked as part of the film crew and were in charge of filming and editing while everyone had multiple acting roles. The actual prize to be awarded at the end of the year was almost unimportant as the students were so excited to be given the opportunity to create a product as part of their classroom assignment.

After the students finished reading the story, they spent one week creating filming schedules and calendars, listing props they needed along with identifying areas on campus that would be appropriate to film their movie. GEO explained to Hadie and Alice that he wanted to see some kind of calendar or schedule of what they would be doing each day to ensure that the filming was completed in a timely manner. So as co-directors, Hadie and Alice assigned members of the new school team to create a filming schedule based on the directions provided by GEO to help them plan what they needed to secure for each day of filming (see Figure 4.8).

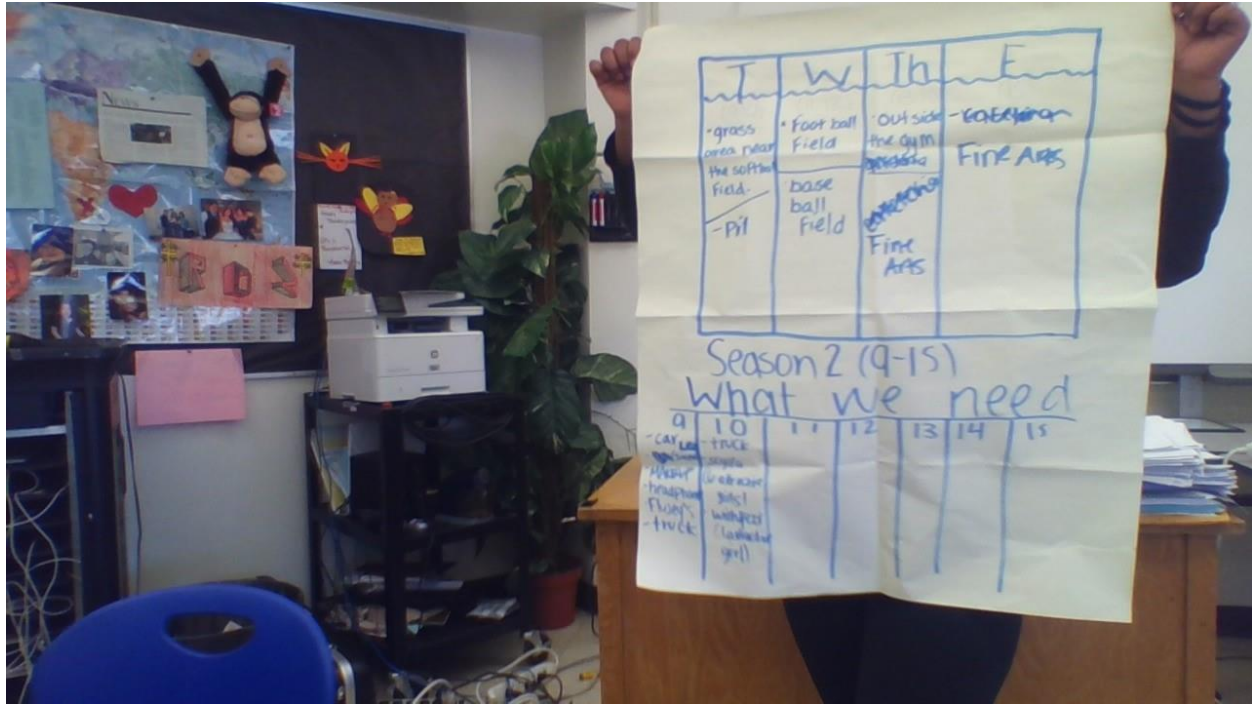


Figure 4.8: Hadie and the filming schedule

Although the filming schedule was simple, it was quite effective for the team as they first discussed what would be filmed when, then as they agreed on what would be filmed, they also discussed what they would need. The students could have written out their schedule on notebook paper, but the graphic organizers that they used during the MVP became very functional tools as they create a schedule that was very easy to read and interpret. Although everyone liked the graphic organizer showing their film schedule, the team realized that for each day they had to be more specific as to what they needed and which places on campus would best mirror the settings of the story. As the team discussed what they needed, Hadie quickly pulled out her notebook to document what her team was discussing (see Figure 4.9).

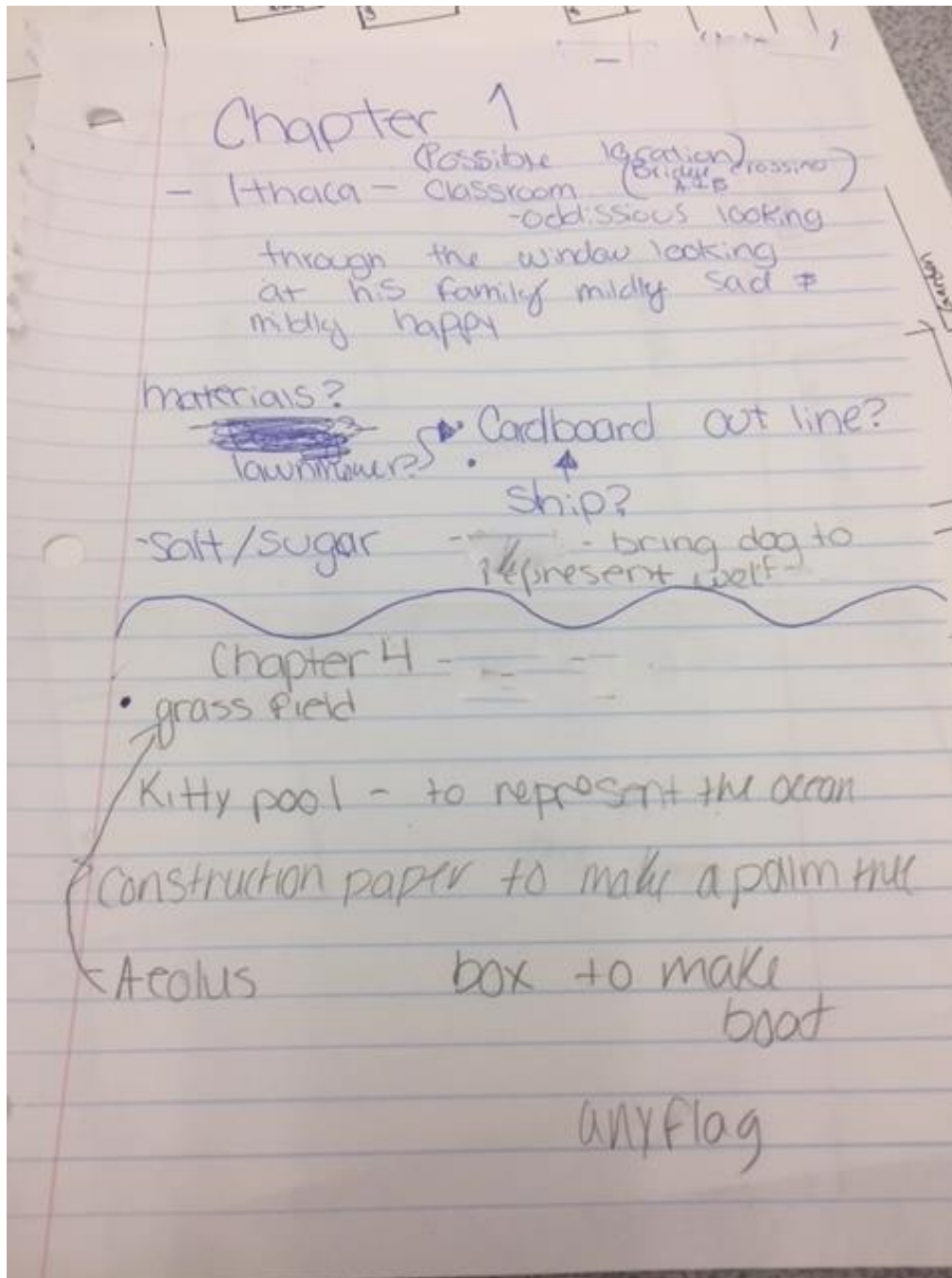


Figure 4.9: Hadie's filming notes

The setting for chapter one was Ithaca, so the students felt that initially it would be best to film that scene in the classroom. After further discussion, they agreed to film that scene on what they

called the bridge (connecting walkway from Building A to Building B) to show Odysseus looking out at his family. Interestingly, the students tried to capture the emotion of the original story and qualified Odysseus' emotions by using the word *mildly*, "Oddissious [sic] looking through the window looking at his family mildly sad & mildly happy" (Field notes, 4/20/17). These were the exact directions that Hadie and Alice gave Anuel as he acted out the scene the next day. The students also include the materials they needed to further authenticate the scene which included cardboard outlines for the ship and another student bring a stuffed animal to represent the dog. Chapter four included the ocean scene, and one of the students volunteered to bring a kiddie pool to represent the ocean. The scene later transitioned to the city of Aeolus which the students planned to film in the grassy area next to Building A to complete their filming for the day.

The next day when I arrived, GEO's team was having a planning meeting to review what they needed to film for the day. Hadie asked her team, "What about chapter 5? We use building A? (Building A is where their classroom is located). *Llegan a la orilla del* (she paused as she read) – *vamos usar la pit*. "You'll get to the edge of (she paused as she read) – we're going to use the pit [the gym]." As she had done before, Hadie referred to how she outlined the various scenes that needed to be filmed based on her schedule. Her notes, reflecting specifics of each chapter, were organized by scene. Within each scene she added key information about what was happening in the scene with suggestions about how it should be filmed. She continued reading her notes regarding the day's filming and added, *Y le hacen follow y los tres men están en [Building] B. Los giants están aquí. Usamos el kiddie pool de chapter five*. "And then you will follow them and the three men will be in [Building] B. The giants will be here. We'll use the kiddie pool from chapter five (Field notes, 4/20/17)." As Hadie elaborated on her notes and

directions for filming, several of the actors and film crew members nodded in agreement confirming the plan of action. The students completed their filming for the day as directed and returned to the classroom to wait for the bell to ring. The students looked tired and flushed since they were filming outside as the sun was beating down on them. I saw Hadie grab her very large and heavy backpack and sling it around her arm while she sat down to review the draft of the script for the next day. The rest of the students were talking and laughing waiting for the transition bell when suddenly Hadie noticed that the script had changed. She immediately got up to inform co-director Alice and together they confronted the script writers (see Figure 4.10).

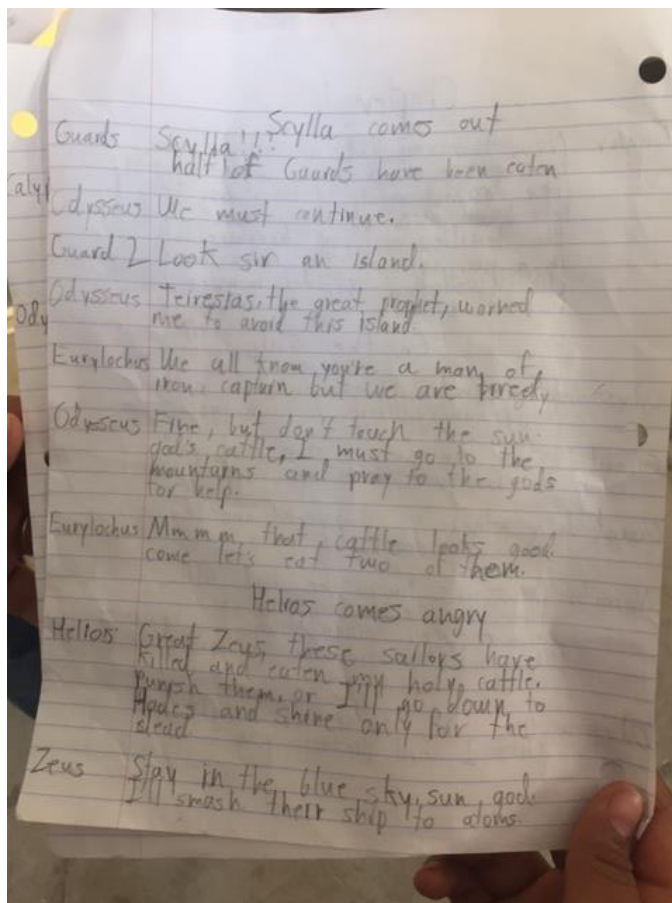


Figure 4.10: The Odyssey script in draft

As the bell rang Alice, Hadie and the script writers remained in class to discuss the changes made to the script. Walter, the head script writer, explained that the writers were still editing the script and that it could still change for the next day. Hadie reminded them that they had secured props and arranged to film the next day based on the original script. Walter ended the conversation by assuring Hadie and Alice that they were still editing and had nothing to worry about.

The gallery walk.

After several days of continuous filming, the teachers decided to give the students a break and have them work on an activity in class. The classroom had five large windows facing the patio and five large windows on the opposite wall facing the hallway. Students were divided into four member teams and each team was assigned a different classroom window that represented a specific chapter in *The Odyssey*. The teachers informed the students that they would project a question on the board, and they would have 40 seconds to write their response or key piece of information regarding the chapter on their assigned window. Once the students finished writing their responses, they were instructed to switch to the next window much like a gallery walk. When the students arrived at their new window representing a different chapter, the students were tasked to read the information posted on the window and identify what conflict was stated or what characters were described. They then had to add a key fact without repeating any of the information already stated. The students switched five times so that they were able to write an important fact from each chapter on five different windows, ending where they started (see Figures 4.11; 4.12; 4.13).



Figure 4.12: Jessica studying her notes before adding information to her window



Figure 4.13: Ramón adding information to his window

Once the gallery walk was completed, the teachers then walked around to review each window. As they read the student comments, the teachers drew attention to key points made by the students while also correcting anachronisms they found. GEO also pointed out that based on

the information on one of the windows, there was a group that was confused on the sequencing as several points were out of order so he wanted to clarify the information for the students before finalizing the filming.

The Odyssey binders.

The Odyssey unit was coming to a close as the students had filmed almost all of the scenes. The next week, the second round of state testing for Algebra I and biology were planned so the school schedule would be modified for testing and the students would not have enough time to add to their filming schedule. ELA informed the students that they needed to make sure they were organizing their binders with the information they had written. By this time, the students had created many artifacts that pertained to their filming project and the binder was a way to organize and preserve what they had done. Each team had a binder that was broken up into sections. I walked over to the binder and was struck by two important facts: 1) The binders were all very organized so that anyone that needed information could easily find it and access it. 2) I was surprised by how much writing the students had completed during the course of this unit. As I was looking at their work, Jessica came over to place something in the binder and then showed me all the information that they had collected. Each binder had a checklist that functioned as a table of content to indicate what was included in the binder. The binders were organized by chapter, and each chapter was sub-divided to include director's checklist, characterizations, costume designs for all the characters, copies of all the scripts, descriptions of all the set locations and a section with all the various story boards. When the students completed an assignment, they carefully filed their work in their binder. If they were working on a task and needed to reference either a set design or a costume for a character, they could quickly access that information by referencing the binder (see Figures 4.14; 4.15; 4.16).

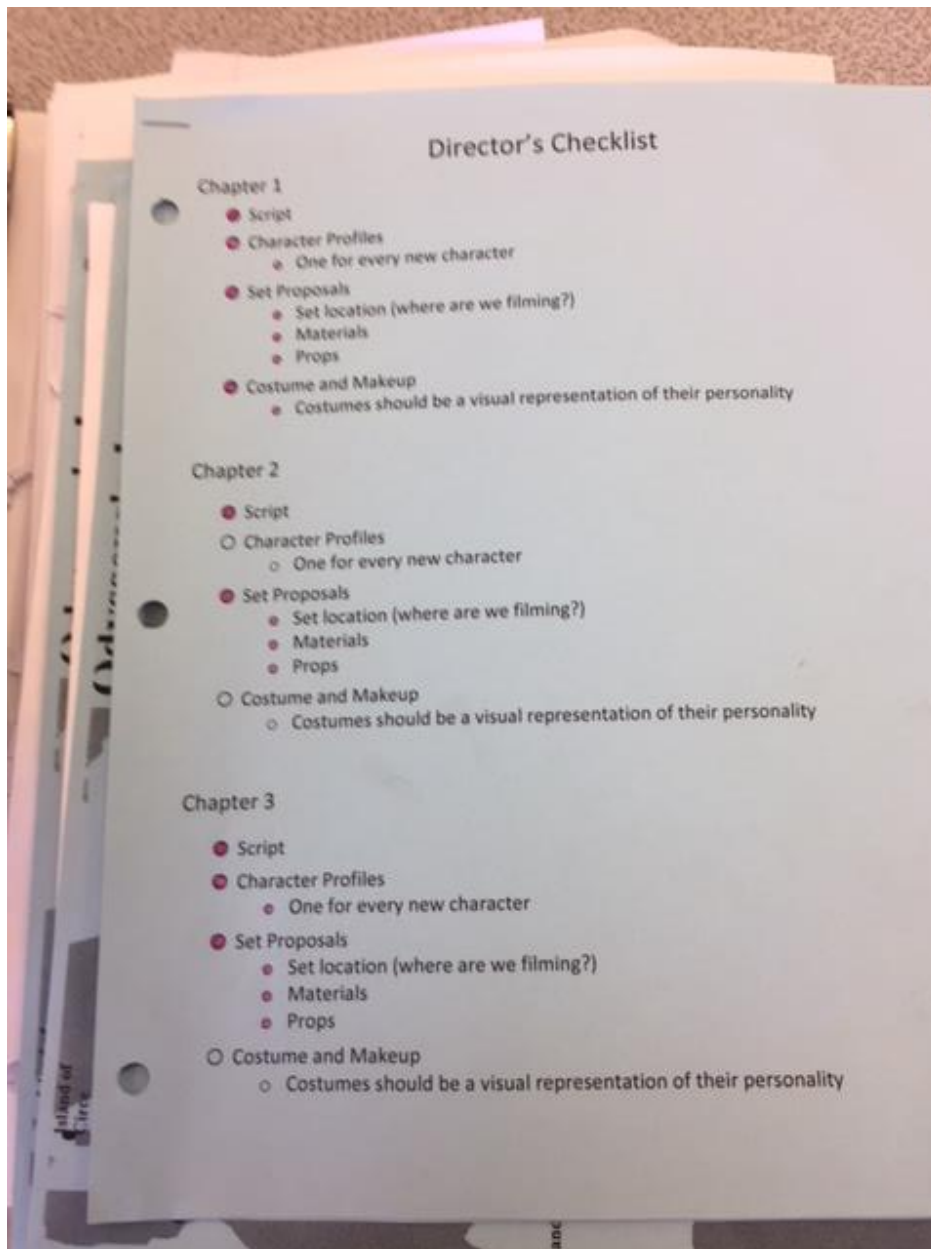


Figure 4.14: Director's checklist

Odysseus:

- Was a legendary Greek King of Ithaca and the hero of Homer's epic the Odyssey.

Penelope:

- Penelope is the wife of Odysseus.

Zeus:

- Is the sky and thunder god in ancient Greek religion.

Circe:

- Is a goddess of magic or sometimes a nymph.

Telemachus:

- Is a figure in Greek mythology.

~~King Antiphates~~

Figure 4.15: Characterization

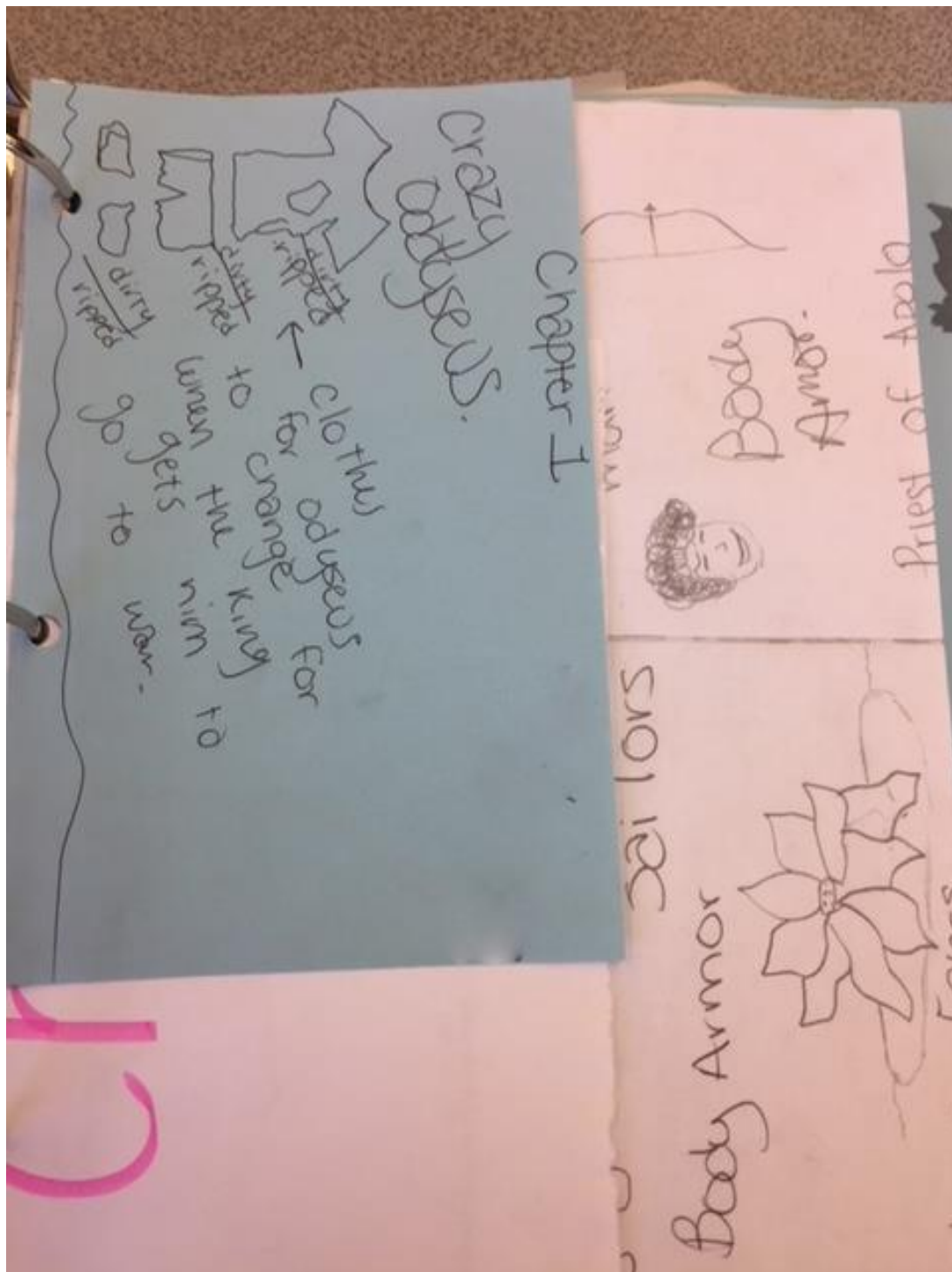


Figure 4.16: Costume design section

The binders not only represented weeks of hard work and effort, they exemplified a culmination of the various types of writing they had practiced throughout the year. Along with the more

creative entries that included drawings and descriptions of characters and setting, the binders also included examples of practical technical writing such as the calendars of their filming schedule along with what props or settings would be best for a particular day's filming. During the focus group interview, Melanie stated, "We do have a lot of fun in our projects, but our teachers wanted us to have practice in the reading and writing because we do need that. Over time, we just got used to it. It's all about adapting to it. Like right now if they tell us to write something, it will be something fast. We're used to it now (Focus group interview, 5/31/17). The binders, including the scripts, showed the adaptability of the students to write effectively using their available linguistic resources. The binders showed that the students were able to effectively use Standard English to complete their academic PBL tasks, but that they also possessed the linguistic repertoire to use Standard Spanish or their translanguaging to communicate and/or make meaning. Cummins identified that there was a difference between an ELL's use of conversational fluency and their academic proficiency. He acknowledge, however, that language registers varied based on the learning environment of the student (Cummins, 1999). So within the confines of the WNT classroom, the students demonstrated that they could use the language resources available to them communicate including informal and or formally in either English or Spanish or a combination of the two (García & Wei, 2013; Thorne & Lantolf, 2006). The work that was included in the binder was more than sample artifacts from *The Odyssey*. The work represented the students' own transformative odyssey to learn to use their linguistic resources effectively communicate both orally and in writing.

Reflections on authoring.

As *The Odyssey* was coming to a close, I asked Jessica how she felt about working on *The Odyssey*. She smiled and said, "Yes this was a lot of work, but I like it because you get to

design things and draw. It's more creative" (Field notes, 4/27/17). The writing completed by the students allowed them to take ownership of their project because they were able to write and contribute creatively based on their understanding of the story to ensure the filming would be successfully completed. Critical pieces of their project like the filming schedule empowered them to direct their own learning and take control of the learning environment. Jessica's sentiments were echoed by the focus group participants when I asked them to reflect on *The Odyssey*.

- 1 NP: Tell me which unit was your favorite unit and why?
- 2 Melanie: I think this one [*The Odyssey*] that we are working on is my favorite
- 3 We are working all together not just working in small groups but in teams.
- 4 Since we were split in half with way more people, we got to work with more people.
- 5 It's something really different, and it's really cool.
- 6 NP: You like this one better because you were in bigger groups?
- 7 Hadie: Yeah, because there was a lot of movement going on.
- 8 Everybody was doing something to contribute to the project.
- 9 Melanie: Yeah, no one was left out doing small details.
- 10 Everybody was doing an important part (Focus group interview, 5/31/17).

The opportunity to work with a larger group allowed them to engage more creatively with others in order to complete their project. Hadie's comment in line 8 that everyone contributed something to the project along with Melanie emphasizing that "no one was left out" in line 9 not only reinforced their WNT solidarity but also provided them with sense of ownership in creating

a product that they genuinely were proud of because it collectively reflected the work of the entire class.

During the last week of school, the students gathered to watch their film creations as part of the first WNT Film Festival. On the bottom floor of Building A, surrounded by the four hallways was the theatre that would be used for the WNT Film Festival. I was surprised that this building had its own auditorium and the gentleman that was setting up the audio/visual equipment said that when the school was first built, this theatre functioned as the district's theatre. The space was intimate with a seating capacity of no more than 150. The chairs were the typical auditorium chairs where the seat flips up with one big difference. The chairs were not made of plastic that is all too common in many of the auditoriums like this. The chairs were made of fine grain wood adding a beautiful warmth to the room. The students started to walk in and quickly found their seats. The film festival started with the teachers giving awards to the students such as best writer, agency award, hardest worker for their work throughout *The Odyssey* project. Once the awards were over, the students were ready to watch their finished products. The room became quiet, but as soon as the film started the students cheered and applauded at their finished product. Both the new school and old school versions captured the essence of Homer's tragedy while at the same time showing the personality of the students of WNT. The films illustrated how that the students of WNT used their language and literacy practices to communicate with others and express themselves both orally and in writing. But their language and literacy practices were not separated by oral interactions or written practices. Hornberger and Link (2012) state that although the mode of communication is different between oral interactions and written exchanges, the two are not opposites. Oral interactions and written exchanges are all forms of communication that can be used interchangeably within an ELL. Oral

and written forms of expression are not separate cognitive functions but merely opposite points on a communication continuum (Hornberger & Link, 2012). The opportunity provided to the students to create and author their work in *The Odyssey* functioned not only to complete their project, but to reinforcing their identity as competent learners, competent writers and not just learners whose second language was English (Luttrell & Parker, 2001). The students of WNT found the most effective means of expression by either using Standard English, Standard Spanish or translanguaging practices to effectively communicate their intent using both oral and written forms of communication. At times they chose an on the spot prosodic declaration and yet at other times they chose to write an intentional the head essay all contributing to their developing their identity as a learner.

Summary

Throughout the semester, the students of WNT were engaged in the writing process on a daily basis. Although the TELPAS writing seemed like an interruption to the instruction, it nonetheless provided the students with an opportunity to express their thoughts on paper. The teachers stopped the instruction to prepare for STAAR hoping that the students could apply what they were learning in class to analyze the reading prompts of the state test.

Their PBLs, however, engaged them in critical thinking, reading and writing that may have served them well as they analyzed the prompts on the state exam. The most technical writing was done for the MVP. Because the students had to persuade city council to adopt their position regarding drilling and fracking, they had to create a presentation that was not only visually appealing, but more importantly one that supported their position with substantiated evidence. The technical writing they did in the MVP served them well in *The Odyssey* unit because they had to write using several modes and formats throughout that project. *The Odyssey*

culminated the school year, but at the same time this PBL unit merged the students' oral and written language and literacy practices as they collaborated to create their original films.

The language and literacy practices of the students throughout the semester demonstrated critical thinking skills orally and written. Their on the spot, in the head and out of mouth languaging interactions showed sophistication as the students translanguaged words, phrases or clauses for emphasis, and their languaging interactions even demonstrated wit and humor as Alice stated that to say "oh my god" would be like her saying "oh my me" since she was a mythological god. This chapter sought to illustrate how that the students of WNT used their language and literacy practices to communicate with other and express themselves both orally and in writing.

This chapter sought to not only identify the oral and written language and literacy practices of the ELLs in the WNT program, but it also sought to describe how they used these literacy interactions to complete their PBL tasks. The findings revealed in this chapter were pertinent to languaging practices, such as code-switching and translanguaging, because students engaged in these forms of social communication to negotiate meaning and intent as well as demonstrating content knowledge. Although code-switching and translanguaging were often stigmatized languaging practices that were considered informal or conversational (Edwards, 2006; Zentella, 1997), the findings of this study revealed that the students of WNT used their translanguaging practices in formal academic capacities to express content knowledge and meaning. This finding contrasted the BICS/CALP theory (Cummins, 1999) that differentiated conversational language from academic language because the data reflected that the students of WNT also used their conversational translanguaging in an academic role to complete their PBL tasks. This chapter addressed the over-arching research question by describing how oral and

written literacy practices of the WNT students helped shape the academic language and literacy development. The findings of this chapter also addressed the first sub-question by describing how the students used Zentella's (1997) linguistic interactions to express intent and how they engaged in various modes of writing from technical writing to creative authoring to complete their PBLs.

A related finding to the use of translanguage as an academic language was that the students of WNT demonstrated making higher order connections to the content through project based learning. The fact that the students read abridged versions of *Romeo and Juliet* and *The Odyssey*, did not prevent them from making higher order connections to the content. Although the students did not read the actual texts, the physical setting of the WNT classroom was conducive to continuously engaging the students in collaborative reflection and social communication to defend their content findings to their team mates. The WNT learning environment contributed to helping the students make those higher order connections to the content. When the students read through *The Odyssey* in class, it appeared that some of the subtle details of the storyline were lost. But when the students physically engaged in acting out the scenes for their film, they understood the motives and intentions of the characters as it pertained to plot development.

Chapter five demonstrates how the language and literacy practices of the students show solidarity and status in the figured world of WNT. Chapter six presents a detailed discussion on the findings of this study along with implication to research, theory, policy and practice.

Chapter 5: Demonstrating Solidarity and Status

The previous chapter showed how the focal students of WNT used oral and written language and literacy interactions to solve their PBL projects. The findings revealed that the students used intentional translanguaging (García & Wei, 2013) and purposeful code-switching such as on the spot shifts in footing, out of mouth conversational interactions and examples of in the head Discourse organization to make meaning and communicate with one another (Zentella, 1997).

The goal of this study was to understand how the interaction of ELLs within a PBL classroom setting shaped their oral and written language and literacy practices. Pertinent to understanding how the students used their literacy practices was to also recognize the role that the social environment played in the students' learning and identity development. As their literacy practices developed and strengthened, their identities within the figured world of Wilson New Tech (WNT) emerged. I will argue that the learning environment within the Wilson New Tech program served to mediating as an artifact that contributed to how students used language and literacy within the classroom setting. In this chapter, I will address the following research sub-question: In the context of the figured world, how do ELLs demonstrate solidarity and status in their language and literacy practices? The language and literacy practices of the focal students helped shape and regulate their figured world, thus this chapter will also address the following questions: 1) What literacy events functioned as pivots that shaped the figured world of WNT? 2) How did such literacy events shape the students' sense of solidarity and/or status in the figured world of WNT?

This chapter begins with background on figured worlds and explores how the common practices and shared repertoires of the students of WNT contributed to the identification and identity of their figured world. The concept of Vygotsky's pivot is also presented, whereby an artifact or event triggers a shift into another realm or into another world. This chapter will explore how various literacy events functioned as pivots that shifted the focal students' identities to either align them in solidarity with their peers or changed their status within their school. A historical perspective of Wilson HS is also included in this chapter to juxtapose the ascribed identities of the students as they entered Wilson High School to the identities developed within the figured world of WNT. The ascribed identities resulting from the cheating scandal connected to the district had lasting effects on the students of WNT that propelled them to embrace their newfound identities within WNT. With the implementation of the WNT program, transformative events acted as pivots that propelled the school and the community to shift into a different sociocultural realm. Like the shifts seen within the larger community and school, this chapter will describe the social practices of each of the focal students and show how various literacy events functioned as pivots that triggered an identity shift for each student.

The Figured World of Wilson High School

Like any other high school, Wilson High School embodied its own unique personality. The school was nestled within a community of alumni that proudly remembered Wilson's glory days in hopes that those days would someday return. Although the neighborhood surrounding the high school was considered economically disadvantaged, the students seemed typical of students around the city. The students walking through the halls were dressed in jeans and t-shirts like other students at other schools. The most visible difference between Wilson HS and other more affluent schools was that Spanish was the dominant language spoken by the Wilson

students and their families. Those who did not know the students of Wilson HS mistakenly assumed that because the students were ELLs, they likely also had learning deficiencies or were gang members or *cholos*. These unsubstantiated discourses consequently characterized the collective student body at Wilson as low performing students or worse, as bad students who attended a school in a district that was associated with a cheating scandal. This chapter will show how a negative public perception cast upon Wilson HS as a result of a plan to inflate district accountability data created an environment where the students collectively started to either question their own value and worth or they developed a sense of righteousness where they felt compelled to prove that the negative discourses surrounding the student body did not reflect their potential to learn. With the implementation of the new WNT program, the narrative surrounding Wilson HS was starting to change. As the students learned to embrace their membership and status as the inaugural WNT students, this chapter will show how the students experienced an identity shift that was mirrored in their discourses and practices. Although memories of the district accountability scandal that started as far back as 2006 were constantly brought to the surface by media outlets, the students started to embrace the idea that the implementation of a new program like WNT was the start of a transformation not only for the community of Wilson, but also for its students.

Once Wilson High School was authorized to become a New Tech school, campus administrators visited the feeder middle school to explain the program to the 8th graders at the time in an effort to recruit them to become part of the 2016-2017 inaugural 9th grade cohort of Wilson New Tech. Students interested in the new WNT program did not need a qualifying GPA, nor were they required to write an essay to demonstrate writing proficiency like students were required to do at other district New Tech schools (Teacher Interview, 4/12/17). Prospective

students did not have to be honor students, nor did they have to be enrolled in a Gifted/Talented or Advanced Placement program. Any student who was interested in the program simply filled out the application in the spring of their 8th grade year to be automatically accepted. The district had informed the Wilson administration that they needed at least 80 students in the first 9th grade cohort of the WNT program. After the principal and assistant principal spoke to the 8th graders, they quickly noted that they did not have the required 80 students; in fact, they only had a “handful” of applications (Field notes, 2/13/17). To reach the required 80 student threshold, the administrators decided to go through the student roster of incoming 9th graders to randomly place students in WNT. The administration of Wilson High School wanted to make sure they had the required 80 member cohort for their inaugural class of what they hoped would be a positive step in transforming Wilson High School from a school that struggled academically to an exemplar of academic rigor.

As the students embraced the practices and procedures of the WNT program, the ascribed identities connected to the district accountability scandal were starting to dissipate. The collective identity of the students at Wilson High School was initially based on misconception that the students were cheaters since several administrators within their district were being prosecuted for inflating their accountability rating. The shared practices of the students, such as defending their district and/or school, identified them specifically as members of this community. As the students developed shared practices within WNT, they embodied membership within that program which is referred to as a figured world. Holland, Lachiocotte, Skinner and Cain (1998) defined figured worlds as cultural “realm[s] of interpretation in which a particular set of characters and actors are recognized, significance is assigned to certain acts, and particular outcomes are valued over others” (p. 52). There are four components that

characterize a figured world (Holland et al., 1998). First, actors or participants are recruited into the figured world. Once they have entered that world, their actions and behaviors contribute to the identity of that figured world. Secondly, social position matters within a figured world. A person can enter a figured world based on their social position or they may be excluded from a figured world based on their social position. Thirdly, figured worlds are “socially organized and reproduced” (Holland et al., 1998, p. 41) where the participants have various roles as they interact with one another. Finally, figured worlds personify the various cultural entities that they create (Holland et al., 1998). Each figured world has its own unique and identifiable personality contributing to the cultural whole. The figured world of WNT was created based on the activities, procedures, discourses or artifacts that were shared among its members (Holland et al., 1998).

As the WNT program was launched in August of 2016, activities, procedures, and program artifacts were yet to be developed. But as the school year progressed, the students within the program started sharing common repertoires and artifacts as they learned to embrace, embody and personify what it meant to be a part of the figured world of WNT. What seemed to be daily and even mundane activities became organized and ritualized patterns that were characteristic of the practices established within WNT, hence characteristics of their figured world. While students outside of WNT looked to their classroom chalkboard to find the day’s agenda, the students of WNT were using figured world artifacts like their tablets to access their daily agenda on their WNT website, Echo. Seemingly benign web links like *What I gotta do* or *What I gotta know* may not have drawn the attention of the average web surfing student. But these links were significant to the WNT students because they were the online links to their daily agenda and provided an explanation of what the students were to learn that day (Field notes,

(3/1/17). The simple and easy to understand online agenda was created by the WNT teachers for WNT in a student friendly language so that the teachers could ensure the students read the necessary information required to complete their PBL tasks in a timely manner. This online artifact could have been used in any classroom, but it was a shared practice that was indicative of the procedures only within the WNT figured world.

In addition to the available tools or artifacts that the students used as part of being WNT members, the students shared several common practices made available only to students within the program. During the Odyssey project the students were tasked to create a “credits” poster for their film (Field notes, 5/24/17). The students were to find pictures of the characters in their film along with pictures of the student-actors portraying them to be arranged on a poster that would be displayed during the WNT Film Festival. Hadie was searching on her tablet for a picture of Odysseus to include on her credits poster. She stared intently at her WNT tablet screen as her finger rapidly moved from right to left as she scanned various webpages and images. Once she found the exact image she needed, she sent the image via the classroom Wi-Fi to the printer by ELA’s desk. She returned with the printed picture in her hand and immediately started to cut it out to place on their poster. I asked her if students outside of WNT had access to this kind of technology.

- 1 “I don’t think so.
- 2 We [WNT students] have access to this type of technology because of the kind of work that we do.
- 3 We could print in our other WNT classes to if we want to,
- 4 but this is the only class with a wireless printer.
- 5 We have this technology available to us to support the WNT students” (Field notes, 4/26/18).

Hadie stated in line 2 that they needed the technological support in WNT because of the kind of work they did which was likely different from the work required from classes outside of New Tech. She clearly stated in line 5 that the technology was available to support the work done by the students of WNT. Students outside of WNT may not have had this kind of support because they didn't complete this type of work nor were they provided with the technology that was made available to the students of WNT. Within WNT, the students logged on to their Echo webpage every day as part of a shared routine which was used only within New Tech. Their tablet, their I-Pad, the Echo webpage and the act of accessing the Echo website were examples of shared practices and repertoires within their learning environment that contributed to their identity as members of the figured world of WNT. The students of WNT quickly embraced their status as members of this new program. The language and literacy practices of the WNT students focused on procedures and rituals establish specifically for their new program which in turn led to the students to embrace their position and newfound status as the WNT kids.

Vygotsky's Pivot

Figured world artifacts such as the *What I gotta do* web link functioned as pivots or triggers that initiated shared practices or actions within WNT. Vygotsky referenced a "pivot" when he observed children using certain artifacts as toys children using a "pivot" as a mediating artifact or semiotic device that triggered an identity shift into another world or another realm (Holland et al., 1998). In Vygotsky's study of children at play, he observed how children assigned meaning to objects during play such as using a stick or a broom to represent a horse. In the study, when the child saw a real horse, suddenly the meaning of "horse" was detached from the stick/broom as it functioned as a pivot or shift where the child now recognized that the animal was a horse and the stick/broom functioned as a toy (Vygotsky, 1978). The WNT tools

and artifacts were “pivotal” to the students because they triggered a specific shift that called them to action. The words *What I gotta do* functioned as a pivot where they shifted the students into action as they read their agenda for the day. Vygotsky’s concept of a pivot was important because not only did tools and artifacts function as pivots, but on a greater scale literacy events within the classroom environment also functioned as pivots that created a shift in the learning trajectory of the four focal students. As the students delved into specific literacy events that functioned as pivots, they moved further away from their former selves. This chapter will provide specific examples of the literacy events that functioned as pivots that shifted the learning trajectory and identity of the four focal students.

Solidarity and Status

In a study conducted by Luttrell and Parker (2001), the authors stated that students used their identities within and/or opposed to the figured world to which they belonged. Like Holland, et al. (1998), Luttrell and Parker (2001) argued that student identities were created or developed based on the day to day activities practiced by the students as part of their figured world. Student identities and the identity of WNT as a whole were fluid and in a constant state of negotiation where at times the students aligned their identity in solidarity within their figured world, and at other times they seemed to opposed that same identity connected to their figured world (Holland et al., 1998; Luttrell & Parker, 2001). As the students negotiated their place within WNT, their figured world was often based on two constructs: solidarity and status (Gee, 2012). Gee (2012) argued that all discourses favored either solidarity or status. The WNT students at times fluctuated between showing solidarity with and opposition to their identity within their figured world. As they collaborated with each other on their PBL projects, they demonstrated solidarity through their oral and written language practices to support each other.

But, at times, the students used their discourse to also assert power and status over their peers within their figured world. An example of aligning their identity in solidarity with their peers was when the students were working on a study guide on gathering information regarding drilling and fracking for the MVP. The students had to read an article then answer some comprehension questions on a study guide. Jessica noticed that Ángel was nowhere near completing the assignment, which was due in less than ten minutes. Since the students were working in teams, they held each other accountable to make sure that all assignments were completed by the entire team in a timely manner. But Jessica's Discourse toward Ángel often included mothering where she used Standard Spanish in a show of solidarity toward Ángel. While many students had already finished answering the questions, she noticed that Ángel was still reading the article and had not yet answered any of the study questions. Jessica looked to Ángel and said, "¿Todavía lo estás buscando? ¿Porque no nos dices?" (*You're still looking for it [the answers]? Why don't you tell us?*) (Memo, week 3). She could just as easily have questioned him using the academic language of the classroom, Standard English, but she didn't because Ángel may have interpreted her questions as a show of status or power. She purposefully asked him in non-threatening Standard Spanish why he didn't ask for help or tell the team that he wasn't finished. Her question was not intended to reprimand him for not finishing, but instead it was a show of solidarity and concern because he was not finished and had not asked for help. Jessica's intent to Ángel was somewhat softened as she questioned him about his assignment using Standard Spanish rather than Standard English. Ángel knew that Jessica was not angry and would help him so when she offered her study guide to him, he readily took it to help him finish his assignment.

An example of opposition to the figured world of WNT was when the WNT faculty introduced a wristband to be worn by all the WNT students. Posted on the walls of every WNT classroom were the core values of the program: Trust, Respect and Responsibility (Field notes, 4/12/17). The core values were simple and clear for the students to understand. The teachers constantly referred to the importance of the students trusting each other which would lead to mutual respect and acting as responsible members of WNT. At the start of the sophomore year, the students were introduced to core values wristband. The wristband was made of smooth rubber that clearly stated the programs values. (See figure 5.1).



Figure 5.1: Trust Value and Respect Wristband

When Hadie showed me the wristband that she was proudly wearing, I thought it was a great artifact that could have functioned as a pivot to trigger unity within the program. But the wristband came with stipulations. It was not simply a gift for all the students. The core values written on the wristband had meaning and in order to be awarded a wristband, the students had to demonstrate Trust, Respect and Responsibility. Every Tuesday, the assistant principal would walk into the WNT classroom and personally award the students who had demonstrated the program's core values based on input from all the WNT teachers, with a brand new WNT wristband. Wearing the wristband also came with privileges such as being eligible for perfect attendance prizes or most importantly being allowed to go to the restroom during class without asking permission. But depending on one's perspective, those privileges could also be considered penalties. When Ramón spoke to me about the bracelet, he was not happy about it because he did not like that the students with bracelets could go to the restroom freely while the students without the bracelets could not.

- 1 Ramón: There are some people who are not going to be able to resist the pressure [and just go to the restroom without permission].
- 2 I think New Tech is going to go to chaos because of that (Ramón Interview 2, 9/13/18).

Ramón was very concerned about the fact that he felt his bathroom privileges were now compromised. We discussed that by earning the bracelet, and showing responsibility, then he could go to the restroom at any time, but he continued to express the fact that he did not feel that it was fair to tie the bracelet to restroom privileges. Clearly unhappy about the new procedures involving the wristband, Ramón stated in line 2 that he anticipated the entire program would become chaotic as a result of this new procedure. As we spoke he continuously would shake his head in a show of constant disapproval and opposition to the figured world to which he seemed

to be a reluctant member. When I spoke to Ángel about the WNT wristband, he initially expressed similar opposition to the new practices regarding the WNT wristband.

3 Ángel: At first I was like Ramón - this is dumb

4 why should someone have a bracelet to go to the bathroom (Ángel Interview 2, 9/13/17).

Like Ramón, Ángel commented on the wristband's connection to being able to go to the restroom. Last year it seemed that the program had escaped coming across any controversies, but this year the wristband as a mediated artifact was causing such a disturbance within the WNT classroom that some students were now expressing disdain and opposition to the program that they once embraced. As Ángel and I continued to talk about the implementation of the wristband, I asked him if he thought it was fair to connect the wristband to certain privileges. His response surprised me.

5 It's not just a bracelet to go to the bathroom

6 it's trust.

7 We're trusting you not just with the bracelet but with the judgement [to go to the restroom on your own].

8 I think it's fair (Ángel Interview 2, 9/13/17)

So Ángel expressed a reversal where he initially expressed opposition to his WNT figured world, then explained that he understood why they were implementing new practices and accepted the incentive and motivation behind the new procedures. Unlike Ángel, Ramón did not see that the bracelet was a positive example of demonstrating the program's core values. Instead he felt that the bracelet was a punitive measure to take away something he was able to do the previous year.

Luttrell and Parker (2001) argued that student identities were fluid and in a constant state of change often aligning to their figured world at one point, and opposing that same figured

world at another point. This point is evident in Ángel's statement where he questions the impact that the wristband has on WNT, but then explains that he thinks it is fair. The students of WNT demonstrated solidarity as they aligned themselves with their peers while at other times they expressed dissatisfaction and opposition to the new procedures of their figured world. The next section of this chapter will review how the history of Wilson High School affected student identity within WNT.

Figured World of Cheaters and *Cholos*

Stereotyping.

Wilson High School was located in one of the poorest neighborhoods in the city, and consequently the reputation of the school was that it was filled with minoritized students who were also likely gang members who could not learn or did not want to learn because they were predominantly Spanish speakers. These stereotypes, regarding the location of the school and the primary language of the students and their families, immediately assigned a lower status to the identities of the students of WNT. Their efforts to dispel such stereotypes and misconceptions about their district, school and their community were reflected in the intent of their discourse. “The biggest misconception is we can’t do anything because we’re Mexican,” said senior Raul Barcenás, 17, in an interview to the local newspaper. The students understood the unmitigated misconception placed on their school, their community and the student body as a whole, and like Barcenás, many students united in solidarity in an attempt to dispel such negative public perception.

The cheating plan.

Drawing on Bourdieu (1997), establishing positive social and academic capital was a difficult challenge for the Wilson students and the school as a whole because the media continued to connect the high schools to the district's cheating scandal. In 2001, when schools across the country were facing tremendous accountability pressure to meet the criteria established by the mandates of No Child Left Behind, several Borderland ISD district administrators acted to ensure that the schools in their district met Adequate Year Progress. The plan to ensure academic success focused on achieving the highest possible test scores, but in order to do this that meant that students who could negatively affect the scores were either encouraged not to test, encouraged to drop out, kept in the 9th grade or promoted to the 11th grade to avoid the 10th grade federal accountability. The students most affected were the most marginalized of the students, the economically disadvantaged Spanish speaking students enrolled in the district. The plan to reverse the district's low performance was a success. Several schools jumped to the academically acceptable category and some reached status as recognized high schools in 2010 (Texas Education Agency Academic Excellence Indicator System, 2003-2012). The district celebrated their transformation, boasted about their success around the state, while the superintendent received a hefty \$56,000 bonus along with a nomination for Superintendent of the Year. But rumors quickly started to circulate about how the district reached that accolade launching two separate investigations by the Texas Education Agency and the US Department of Education. After years of investigations, subpoenas and testimonies, the superintendent, an associate superintendent and a district director were convicted on various charges including conspiracy to defraud the United States connected to their participation in the scheme to inflate district accountability. Other district administrators who were connected to the cheating scandal

were also indicted on federal charges including conspiracy against the United States, retaliation against witnesses and false declarations against a grand jury. Details of the plan to inflate scores were on every newscast, newspaper and social media outlet adding to the already negative stereotype surrounding the students enrolled in the district's high schools. Whenever the district had a news worthy story, there was always mention of the cheating scandal and seldom a reference to any of the positive accolades of the students. Because high level administrators who were seen as people of power and influence were connected to the cheating scandal, the public continued to associate the district high schools with unethical practices and low performing academics. The journey to rise above controversy was a continuous and on-going challenge.

In 2013, some Wilson High School students were interviewed by a national news outlet at the local Whataburger about the district cheating scandal.

- 1 Student 1: It's not true, huh? It's not true?
- 2 Student 2: Yeah it is. Pues ya dijeron que si, pues (*Well, they already said yes, well*), yeah, it's true and
- 3 Student 2: it does feel bad because everybody looks down on us.

With initial disbelief as stated in line 1, the students were trying to come to terms that their district was in fact connected to a cheating scandal. Student 2 confirms that "they" the administrators, already admitted to what they did, and she summarized in line 3 that now everyone was looking down at them as a result of what these administrators did. The discourses of the students of Wilson High School reflected the ascribed identity cast upon them as they came to the realization that district officials in fact admitted to wrong-doing. The plan to inflate scores was used throughout the district, and it was unfortunately associated with the district's high schools. Dr. Jones, former Wilson principal who was not involved in the district cheating scandal, felt that no matter what the high schools did to reverse public perception, they just

couldn't win as the negative association to the cheating scandal was always being reinforced by various media outlets. The cheating plan carried a wave of negativity that was ultimately inherited by the students of Wilson High School as students within the district.

Cheaters and *cholos*.

One of the characteristics of a figured world is that its members are recruited to be part of that figured world (Holland et al., 1998). The WNT students were recruited if not placed in the program that they ultimately willingly joined as inaugural members. But the WNT students belonged to two figured worlds, the figured world of WNT to which they aligned in solidarity, but they were also connected to the figured world of district high school students with ascribed identities as cheaters and *cholos*. The fact was that the WNT students were in elementary school when the adults orchestrated their plan to inflate scores between 2006 and 2012. If the criteria of a figured world was that members were recruited to be part of such figured world, then because the WNT students were not even enrolled in Wilson HS during the time of the district's cheating scandal, then it stood to reason that they did not belong to the figured world of cheaters and *cholos*. So why were the WNT students continuously defending their reputation and why did they feel they had to reverse the stereotype cast onto them as high school students enrolled in a district associated with a cheating scandal? Although the WNT students were not part of Wilson HS during the district cheating scandal, nor did they have any association to the school during that time period, they were still connected to the figured world of cheaters and *cholos* because it impacted the entire district in which they were enrolled. They were unwilling members of the figured world of cheaters and *cholos* simply because they were students at Wilson HS who unfortunately inherited a negative reputation through no fault of their own. Some of the Wilson students were interviewed by a national news outlet in 2013 about the district cheating scandal.

The sentiments of the students interviewed then in 2013 were not so different from what I heard in 2017 from the students about the reputation of the district's high schools. Luttrell and Parker (2001) stated that it was important to not assume that the position of a student within their figured world equated to their disposition as a person. The students of Wilson HS were victims of the general public assuming their disposition was aligned to the figured world of cheaters to which they opposed. The students of WNT were aware of the reputation that their city held about their district, and their status as cheaters and *cholos* was something they felt they had to refute.

During one of my routine classroom observations, Ms. Smith, the assistant principal, proudly shared with me that the students had completed the third common assessment mandated by the district, and the WNT scores had almost doubled from the previous semester. Since Wilson HS had struggled academically in previous years, Ms. Smith was beaming from ear to ear as she revealed each reporting category that showed significant gains from the previous assessment. Ms. Smith stated that because of the progress the students had made, she was optimistic that this was a positive predictor for the official state assessment later in the spring (Field notes, 4/10/17). Ms. Smith mentioned that if the students maintained the same level of performance from this benchmark to the 2017 test, they would easily exceed last year's state test scores. I felt that information was important because it led me to believe that the school had set up systems to monitor the academic progress and achievement of the students that could lead the school out of academic trouble. But I was still curious about the actual logistics of how the students tested at Wilson. Did they test in their WNT classroom, a different classroom or even in the gym? A couple of weeks later, I was sitting with a group of four students working on their class project, and I then asked them about how they tested – if in their WNT classroom or in the

gym? Anuel, one of the boys at the table, said that they did not test in their WNT classroom because “they don’t trust us. We test in other classrooms with other stupids – I mean students” (Field notes, 5/8/17). The Freudian slip was somewhat amusing and the other students at the table giggled. The question was now, who doesn’t trust you? What does that mean? When I interviewed the WNT teachers I asked them how they felt about their benchmark scores since the students of WNT had already exceeded the student performance from last year. ELA stated, “I graded them very harshly so I feel our scores could have been better. I really wanted to make sure I hit every little nitpicking thing I could so that our kids could say [they] have room for growth” (Teacher Interview, 4/12/17). Although the WNT teachers and students celebrated their benchmark scores, other teachers on campus questioned those scores.

ELA continued:

[The] teachers were saying, ‘Oh he cheated. Oh, they probably did this. The teachers left the posters in the room, oh they did this and that’... That’s a reflection of their insecurities like there has to be something wrong...It’s that knee jerk reaction to find something bad in others (Teacher Interview, 4/12/17).

So the students who suffered so much accusation and recrimination in the past due to the district cheating scandal were still continuing to do so on a different level, but this time within their own school environment. The caution from Luttrell and Parker (2001) came to fruition as the students’ own teachers assumed their position was now their disposition as cheaters. During the student focus group interview, the students discussed how they felt about being accused of cheating.

Stanza 1 (Justifying the testing change)

- 1 Alice: That's why they made us test in regular classrooms.
- 2 We were supposed to test all together as WNT.
- 3 It was a last minute change. We all knew where we were supposed to test.
- 4 But because we had the highest [benchmark] scores they suspected that we were cheating.

Stanza 2 (Verbalizing the accusations)

- 5 Anuel: They thought the teachers were giving us the answers

Stanza 3 (Recalling the emotions)

- 6 Melanie: I remember that day because
- 7 the teachers were really upset
- 8 We were upset too.
- 9 Why would anybody think we were cheating? (Focus Group Interview, 5/31/17).

The students eloquently expressed their solidarity as a cohort in questioning why other teachers would assume they cheated. While they aligned in solidarity with their WNT figured world, they opposed their unwilling membership in the figured world of Wilson HS's cheaters. They had been touted as the up and coming WNT with a status to be proud of, but now their coveted status was in question as they were once again aligned as cheaters. The complete picture revealed that the students took the benchmark assessment in the WNT classroom, and the assessment was graded by ELA. The scores indicated significant student gains, but some faculty members from Wilson High School, not Wilson NT teachers, questioned whether or not the students received some kind of assistance from the WNT teachers. The accusation angered the WNT faculty

especially since ELA stated that he graded their essays very harshly and had he not done so, their scores may have been even higher. In this instance, the learning environment of the WNT classroom functioned as an artifact that worked against the students as teachers assumed that because they tested in their classroom either their teachers helped them or the learning environment contributed to the increase in their scores. The next section explores how campus initiatives to monitor student performance were connected to the figured world of WNT. As the school year progressed, the campus received the state's preliminary test scores which were disaggregated to show the performance of WNT in comparison to the general student population of the school. The scores became an integral component and pivotal artifact to their figured world of WNT.

Literacy Events as Pivots

Vygotsky studied how mediated artifacts or tools acted as pivots that could trigger a person to shift into another realm or state of mind. While several artifacts such as web links or End of Course scores functioned as pivots that triggered the students to take action or that led to an identity shift, certain literacy events also functioned as pivots that triggered a demonstration of either solidarity or status in the students' language and literacy practices that shaped the figured world of WNT. This section will explore how certain literacy events functioned as pivots and additionally will show how each literacy event triggered a shift or transformation within the identity of the four focal students.

Ramón

Much like Hadie, Ramón often used his language and literacy practices to show solidarity with his peers, but he also used his actions to demonstrate status and power over his peers.

Ramón understood that because he was part of WNT, he was given certain liberties and privileges that were not necessarily available to student outside the program. He recognized the differences between the physical structure of the classes comparing the rows of chairs in the traditional classes to the tables and groups typical of his WNT classes. His differentiation between the two types of instructional delivery methods placed a certain level of status on the students of WNT because they were given opportunities to collaborate with one another whereas the general population of students were not.

Ramón often demonstrated a driving sense of urgency, more than the other students, primarily because he not only came to school to learn, but he came to school to sell the burritos that he and his mom prepared that morning. I often overheard Ramón approaching his peers with a driving focus in an attempt to sell all his burritos. He was quite the salesman, and his language and literacy practices played a critical and successful role in his sales so much so that he normally sold all 35 burritos by morning. His identity was that of a business man who was ready to sell burritos at any time, and through his burrito selling, I learned a lot about Ramón. His one and only priority was financial gain for himself and his family. He protected his “job” fiercely so that no one came between him and his profit margin. He knew that he was not allowed to sell on campus, but he also knew that there were many willing customers at school who would support his business. While his PBL team was working on writing their group’s norms for the Mountain Vista project, Ramón’s priority was focused not on the team’s goals to finish their PBL task, but on his sales.

Stanza 1 (On task)

1 Hadie: What are going to be the group rules?

Stanza 2 (Focus on business transaction)

2 Ramón: Te di dos (*I gave you two*) [talking to another student about his recent burrito transaction] te di dos dólares, (*I gave you two dollars*)

3 y te dije hay te doy lo demás (*then I told you I'll give you the rest*).

Stanza 3 (On task)

4 Hadie: Don't use the phone, if not necessary?

Stanza 4 (Interruption from second student)

5 Second student approached the table: ¿Tienes burritos? (*Do you have burritos?*)

6 Ramón: Si (*Yes*)

7 Second student: ¿De que? (*What kind?*)

8 Ramón: Me quedan puros de papa...Dos de papas con chorizo. (*I only have potato burritos left. Two with potatoes and chorizo*)

Stanza 5 (Caution to Ramón)

9 Ángel: Hurry up.

Stanza 6 (On task)

10 Jessica: What can be another group rule? (Field notes, 2/27/17).

Hadie and Jessica were seemingly unfazed by the interruptions to their team's collaboration as Hadie focused on created the group rules in line 1. Despite the fact that two different students approached their table (line 2, line 5), the student team continued working on completing their task, and they continued working on their team norms as if there were no interruptions as indicated in line 4 then again in line 10. Ramón's demeanor was business-like, and the fact that

others recognized this further reinforced and somewhat elevated his status within the classroom as that of the successful salesman. When a student questioned how much change he received from his last purchase, Ramón remained calm and again exerted his status as the clear headed businessman as he quoted the conversation in line 2 to remind his customer exactly what was said. During these business transactions, the team continued to write out the group norms, even when a second student, i.e., customer, approached the table to purchase the remaining burritos. Ramón's priority was clear as he knew that the MVP tasks would be completed by his peers, but he alone had to attend to his customers to keep them satisfied. The only reference up to that point from the team regarding the sales transactions came from Ángel in Stanza 5 who warned Ramón to hurry up for fear that he may get caught selling burritos in class. GEO stopped by our table to monitor the progress of the team to see if they had chosen a position either for or against the drilling and fracking. The above conversation continued:

- 1 Ramón: Hey, mister, si, yo le voy a poner que si, and
(*Hey, mister, I'm going to write yes,*)
- 2 I said that let's do the drilling
- 3 because that will give benefits to my grandpa por que se va a trabajar
(*because he will be able to go to work.*)
- 4 Jessica: También piensa en tu
(*also think of yourself*).
- 5 GEO: What is that called, logos, ethos or pathos?
- 6 Ramón: Ethos and pathos.
- 7 Jessica: Los dos. (*Both*)
- 8 GEO: Mostly pathos, but I can see where you're coming with ethos.

The interruptions from the burrito sales did not deter the team from writing out their group norms. More significantly, when GEO approached the table to ensure the students were on task, Ramón immediately stepped up to offer his position on the issue in lines 1 and 2 along with his justification in line 3 reinforcing to GEO that the team had been completing their work as assigned. Ramon's statement was significant because his response to GEO regarding their position either for or against reflected his business-like discourse. When GEO approached, Ramón not only clearly and directly stated his position, he also included a solid justification for his position. While Jessica and Hadie were still wavering on their stance, Ramon demonstrated that he could take a position and defend his reasoning as well.

In one of my first meetings with Assistant Principal Smith, I asked her about Ramón. She admitted that he was very smart, but wondered if he was an undiagnosed Attention Deficit Hyperactivity Disorder (ADHD) (Field notes 3/10/17) simply because she noted that he was always on the go and sometimes acted up in class. I don't know if he was ever tested to see if he had ADHD, but I know that he was never tested to see if he was Gifted/Talented (G/T). When the pace of the class slowed there were times that Ramón looked bored and consequently acted up, but he never looked bored while he was selling his burritos because that was his priority. When he had a backpack full of burritos, he was very aggressively walking around the classroom letting everyone know that he had several burritos to sell. He exerted his sense of agency and status to sell his product and focused his use of his language and literacy practices not on completing the academic tasks within the classroom, but to describe his products to potential customers to finalize his sales.

I was able to see some insight into Ramón's thinking that led me to believe that he was really much smarter than he was given credit for. He was very level headed when it came to his

food sales, and I observed how he was starting to apply this focused and logical thought process to his academics. When the students were tasked to choose a position either for or against the drilling and fracking in Mountain Vista, ELA reinforced to the entire class that they needed to study all the issues before taking a position. He was conducting a typical check for understanding and asked questions that the students answered in unison as a class. ELA reminded the students, “Know the issues! You will have to compare and...” the students responded in unison, “Contrast!” ELA then continued, “Look for cause and...” the students once again replied in unison, “Effect!” But then he asked the students, “What do you use to make an impact on what you are saying?” The collective replies from the students stopped and the room became silent. Suddenly Ramón burst out in his typical loud voice, “Ethos, Pathos, Logos!” (Field notes, 2/27/17). ELA confirmed his right answer and reinforced to the students how these previously taught concepts applied to the task of establishing their position to drill or not drill in Mountain Vista. Ramón was able to draw from previous learning and apply the concepts of Ethos, Pathos and Logos to the Mountain Vista project.

I also discovered that Ramón was a reader, although he did not identify himself as a reader. Every time the students received some kind of text or online article, he quickly accessed it on his phone or tablet and would start to read it. I witnessed his level of concentration as he was normally mouthing the words as he was reading in what Vygotsky referred to as inner speech (Thorne & Lantolf, 2006). His cell phone was never far away from him and often times he was reading and mouthing what he was reading from his phone. Towards the end of class one day, we had an interesting conversation that made me wonder exactly what was he always reading from his phone.

- 1 Ramón: Miss, do you want to know something really bad?
- 2 NP: Tell me.
- 3 Ramón: I found out the world is in debt with \$3.5 million.
- 4 I mean three something *billion* dollars. But there's this question that says— who is the world in debt to?
- 5 NP: What's the answer?
- 6 Ramón: Let me look it up.

This random fact seemed to be something that Ramón had read about before. He quickly understood his error in initially quoting a \$3.5 million dollar debt when he corrected himself citing the \$3.5 billion dollar debt, but he was very animated when he was presenting this fact to me. It was intriguing that what fascinated him was a fact related to economics and money, very much aligned to his identity and priority as a salesman on campus. When I asked him for the answer and he said, “Let me look it up,” he then immediately turned to the artifact that would provide him this type information: his phone. With his head hunched over his phone, and with a driven focus to find out more about this billion dollar debt, I saw more potential giftedness than characteristics of ADHD. Because Ramón was never tested for either, the assumption remained at least in the eyes of the assistant principal, that he was an undiagnosed ADHD student. His identity as a loud boisterous and often misbehaved learner may have masked his identity as a gifted student (Payne, 2005). It may have been difficult to recognize his giftedness because teachers often re-directed his behavior. I believed this may have been the issue with Ramón since his animated personality often drew negative attention and may have hid his true potential as a learner.

In referencing Vygotsky's concept of a pivot creating an identity shift, the pivot that launched Ramón's true transformation was evident when the MVP was coming to a close. The project culmination was marked with the students presenting their positions either for or against to members of the city council to help them decide whether or not to move forward with this project. The student presentations consisted of a PowerPoint that stated their position with supporting data from the research they had completed. They also had to include various other artifacts such as graphic organizers, maps, 3D models to help support their position. In addition, the students were to engage the members of city council with some kind of demonstration to further reinforce their argument. The presentation to city council was scheduled on the Friday before the students were to start their spring break. The team's presentation was coming together nicely, and everyone was clear on their role until Hadie and Ramón announced that they would be absent for the final presentation. Although Jessica and Irving clearly understood the concepts and intricacies of their project, they were not the public speakers that Hadie and Ramón were. The presentation would suffer terribly if the students were not able to clearly and effectively express their team's position regarding the drilling and fracking in Mountain Vista.

The students continued finalizing all the components to their presentation as it was now only two days away. As the students worked on details of their project, ELA stopped by their table to check on their progress. Hadie, the task manager, explained to ELA that Ramón was putting the finishing touches on the PowerPoint presentation, and Ángel was finishing the graphic organizer illustrating their position. Jessica was finishing a map of the Mountain Vista area, and the team was collectively working on an activity where they were to simulate how investing in the recovered oil, using a bottle of olive oil, a person could potentially gain a significant profit. As ELA listened to their ideas, he seemed very pleased with their progress

until Jessica stated, “Ramón y Hadie no van estar aquí el Friday” (*Ramón and Hadie will not be here on Friday*) (Field notes, 3/8/17). ELA gave Hadie a wide eyed stare for several seconds, then turned to Ramón. I looked over at Jessica, and she would periodically would rub the side of her head as she was acting like she was reading her tablet, but it looked like she was getting ready to cry anticipating that their presentation may be severely compromised. Suddenly, Ramón stated, “I *will* be here.” Silence. The entire team, including ELA, then turned to face Ramón almost in disbelief to what they heard him say. Ramón turned to ELA and then asked if he could videotape his portion of the presentation and have his team use that. ELA, with a stunned look on his face did not reply to Ramón. The emotion filled silence was painful, until Ramón said, “I know she’s nervous, I can see it.” This sentence epitomized a transformation within Ramón. Up until now, Ramón had only expressed concerned for himself and his own well-being. His priority up until this point was making money from his burrito sales. A family trip to Puerto Peñasco was certainly something that he would enjoy, but his sense of abandoning his team during such a critical time suddenly became too much to bear, and he suddenly made the decision to stay to support his team. After the presentations, I asked the teachers to reflect on the performance of this focal group.

Stanza 1 (Justifying Ramon leaving)

- 1 ELA: Ramón had every right to say my family is going out of town, we're going on vacation - I'm gone.
- 2 He had every right to do that.
- 3 His mom could have said, you know what...

Stanza 2 (Recognizing transformation)

- 4 God, I'm so proud of that kid!

Stanza 3 (Recognizing transformation)

- 5 GEO: Ramón went from a young man possibly being removed from the program to now moments of celebration - that we have to celebrate him (Teacher Interview, 4/12/17).

The pivotal trigger for Ramón was the fact that he had contributed significantly to the development of this presentation. When he announced that he was leaving, the impact on the remaining team members, Jessica and Ángel, was evident as they quickly started to show distress in having to carry their team's presentation. Ramón's transformation came at a very critical moment for his PBL team. His identity shifted from the salesman prioritizing his personal gain, to the team leader who could not let his peers down in a moment of crisis. On the day of the presentation, they successfully demonstrated all the components of their presentation including engaging the members of city council in a mock oil purchase to show that the city could potentially make a profit. As soon as the presentation was over, Ramón was laughing and giggling almost uncontrollably showing that he was happy with the outcome. The MVP presentation function like a pivot and shifted Ramón from a salesman out to take care of himself to a team leader that took control of a situation to support his entire team. In the study by Bartlett (2008), she chronicled the identity development of Maria, who was a student at Luperon High School. Because she was a student with an interrupted education, Maria recognized that she was characterized as a struggling learner and acted to change that perception. Because she knew that she had the capacity to be a strong learner, Maria aligned herself with teachers she knew would support her learning and ultimately embraced her new identity as a strong learner (Bartlett, 2008). Like Maria in the Bartlett study (2008), Ramón now embraced his newfound identity as that of a good student who could prioritize the academics over his personal gains. His wide smile and his uncontrollable giggling were evidence that he was pleased with the direction

he had taken to work *with* his team. Too many times in the past, Ramón was in trouble for talking too much and not staying on task, but now Ramón was the person who led his team through a successful presentation.

When I first met Ramón, it was evident that he was already a very confident person. Ramón was not afraid to talk to anyone, and he often showed that he was charming, funny, and smarter than most realized. I wasn't sure that there would be an evident or significant transformation in an already confident Ramón from the beginning of the year to the end of the year. Although he could have been a better student, a better rule follower, it seemed that Ramón carried the confidence and sense of agency to carry out his days on his terms. Ramón's pivotal transformation was surprising and unexpected because he so clearly demonstrated throughout the year that his priority was only himself. When Ramón saw that his possible absence would negatively impact his team's performance, that event triggered a shift in Ramón where he prioritize the needs of his team over his own needs. Rather than enjoy a vacation with his family, he chose to stay behind so that he could support his team's presentation. His actions demonstrated a shift where he acted on his sense of solidarity to support his team knowing that with his participation, his team would achieve the status of completing a successful presentation. His identity shift was so impactful because it not only changed Ramón, but it positively affected his PBL team as well.

Ángel

Ángel was the quiet one of the group. He was more reserved than the others and seldom got involved in the sometimes distracting banter between Hadie and Ramón. Unlike Ramón, Ángel applied in his 8th grade year to be part of WNT and stated that he felt good about learning new things so the idea of being part of a new program intrigued him (Ángel Interview 3/31/17).

Whenever the teachers were explaining a project, Ángel was always taking notes. Like Jessica, he was very conscientious about completing his assignments, but did not often engage verbally with his team or teachers to share his ideas. Because he was so soft spoken and because he rarely spoke, I couldn't determine early on whether or not he was understanding the content of the instructional material presented to him. Because Hadie and Ramón had very strong personalities, it was sometimes easy for Ángel to sit into the background rather than seek the status of becoming a team leader. On a day when the WNT teachers were at professional development training, the substitute teacher assigned the students to work on a map for the upcoming *Odyssey* project. Ángel walked over to my table, and I asked him to tell me what he thought the other students were saying about the WNT students. "Tienen celos porque ellos piensan que somos especiales." (*They are jealous because they think we are special.*) He stopped for a couple of seconds as he was looking down contemplating what he just said and then continued, "Pues si somos. Ellos dicen que somos tontos porque hacemos mucho estudio." (*Well, I guess we are. They say we are dummies for studying so much.*) (Field notes, 4/7/17).

Rather than aligning himself with the solidarity of his friends who characterized the students of WNT as *tontos*, Ángel accepted the elevated status of being someone who was known for studying. In his eyes, studying a lot was not a bad thing because learning was part of the status that he valued as a student. Clearly, Ángel understood the status that WNT carried around campus, and he accepted that status as a member of WNT. It was interesting that although Ángel chose to accept the elevated status of WNT, he most often kept a low profile within the program. His quiet demeanor may have been as a result of working with some very animated personalities such as Ramón or Hadie, or it may have been because he was an ELL who was still learning

English. Although Ángel was not an active team leader within his WNT team, an opportunity presented itself that created a pivotal shift in Ángel's usual docile behavior.

On a day that the students were working to organize their Mountain Vista presentation to the city council, I noticed that Ramón was absent. I remembered that his NJROTC unit was having their yearly inspection, and admittedly, the classroom was a little quieter than usual. The students had just finished reading an article about Torchlight Energy, the company that was interested in drilling and fracking in the neighboring county. The students were assigned to answer some basic questions to check for understanding when GEO asked each team to send a representative who was not the norms manager or the task manager. This uneventful yet pivotal request created an opportune occurrence for Ángel to leave the comfort of the solidarity of his team and use his sense of agency to elevate his status to team leader. Since on this day their team was down to three people, Hadie as the task manager and Jessica as the norms manager, Ángel was the only team member available to accept this call to action, so he took advantage of this occasion. This fortuitous literacy event proved fruitful for Ángel because it brought out a part of his identity that was within him, but he had not yet exhibited this aspect of his personality to others and maybe not even to himself. Ángel always demonstrated that he was a conscientious learner by taking notes, turning in all assignments and keeping on task, but now he was ready to demonstrate to his team that he was a leader who was ready to complete a task for his team's presentation.

So when GEO asked for a student who was not the task manager or norms manager, Ángel didn't reluctantly walk over to his teacher's desk like someone forced to participate in an event. Instead, he frantically looked for his notebook, then immediately grabbed it and hurriedly walked over to GEO's desk (see Figure 5.2).



Figure 5.2: Ángel receiving task assignment

While Ángel and the other team representatives were meeting with GEO, Hadie and Jessica continued working on creating a poster for their presentation. The meeting with GEO ended, and I saw Ángel quickly walk back to the team's table. He immediately sat down, spread out sample graphic organizers on the table and then using Standard English, he started to explain what his team had to do. He was talking very quickly and sometimes seemed like he was out of breath as he searched for the right words to explain the task. He explained that they needed to list the negatives involved in drilling, but suddenly he paused. I wasn't sure why he paused until Jessica pointed to the top of the form and said, "Dice positives arriba." (*It says positives on top*) (Field

notes, 3/1/17). Either Ángel lost his train of thought or the word “positive” may have escaped him possibly because he was trying to remember everything the team had to do. Nonetheless, he continued to explain that their team had to produce some kind of graphic organizer that represented a concept in their presentation. It was evident that GEO charged these students with making sure this aspect of the project was successfully completed. GEO showed the students several graphic organizers from which to choose, and the students were to go back to their team, explain the assignment and lead their team to create a graphic organizer to be used within their presentation. This task was very significant for Ángel for two reasons. First of all, it gave him the unexpected opportunity to lead. Had Ramón been in class on this day, Ángel may have deferred to the more dominant Ramón and his chance to lead may have been lost. The second reason this was significant for Ángel was that it provided him with a chance to author part of the project (Luttrell & Parker, 2001). Although much of the work was completed collectively by the team, Ángel was now in charge of ensuring that the graphic organizer was aligned to their team’s position illustrating why the city should move forward with the drilling and fracking. Ángel was given the opportunity to use his language and literacy practices to express his views on this project by leading his team to create the graphic organizer. The team ultimately decided to create a bubble map showing the advantages to drilling and fracking (see Figure 5.3).

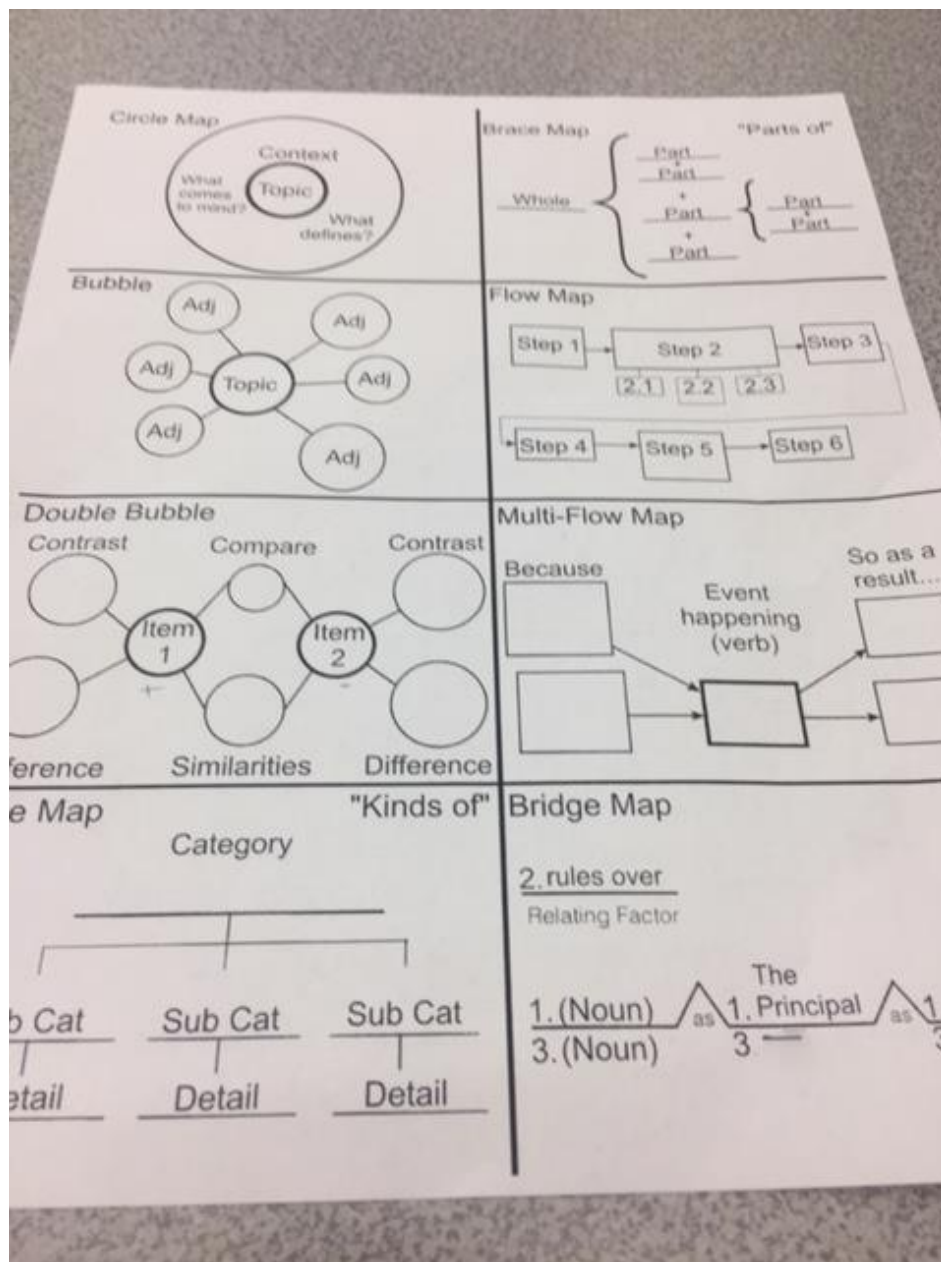


Figure 5.3: Graphic organizers for Mountain Vista project

In a study contrasting the identity of perceived street smarts versus book smarts, the author references Vygotsky's use of artifacts as semiotic mediators (Hatt, 2007). The artifact that created the shift or pivot in transforming Ángel's identity from reserved team member to team

leader, was the opportunity to create the graphic organizer. When Ángel explained to his team what they had to do to create the graphic organizer, he was viewed as the expert in that area. That artifact contributed to the ideology of being smart and influenced how others viewed Ángel, but more importantly, it influenced what Ángel believed about himself - that he was a valuable member of his team. The graphic organizer also functioned as a pivotal artifact that initiated Ángel's sense of agency (Holland et al., 1998) and changed what other's perceived to be Ángel's typical classroom behavior. The fact that Ramón was absent when they needed a team member to lead in the creation of the graphic organizer, was an unexpected yet pivotal event that led to a shift from Ángel acting as a passive and docile student to the leader who was directing his team.

Ángel's transformation continued into the next project based on *The Odyssey*. As part of that project, the students were to create or author their own film version of the story by Homer. Although the graphic organizer brought out Ángel's ability to lead, he was still by nature a reserved person, and I wasn't sure if he would embrace the "acting" that was required of creating their film. On one of the first days of filming, GEO explained that the students were going to be using his truck to simulate Odysseus traveling by ship. Odysseus' men were tired and weary as they were on a 10 year journey. I looked into the cab of the truck to see how weary these men actually were, and sitting in the back seat was Ángel playing the part of one of Odysseus' men. The shift in Ángel's persona was significant. When I first met Ángel, he was often watching others participate in the various WNT activity. If the teachers directed him to participate, he would, but I never saw him volunteer. When he was assigned to work on the MVP graphic organizer, he volunteered because Ramón was absent. That fortuitous and pivotal event seemed to trigger a change in him that he learned to embrace. Ángel's role in the filming of the *Odyssey* functioned both as establishing solidarity and status. As part of the crew of actors, his sense of

solidarity empowered him to act out the necessary scenes with fidelity to truly represent the story. At the same time, the fact that he was so attentive in carrying out his acting skills, he was cast in several other scenes elevating him to the status of reliable actor. Ángel's identity shift was triggered by a pivot that provided him with the opportunity to lead his team to create a graphic organizer during the MVP project and continued to sustain him through *The Odyssey* project. The graphic organizer functioned as an artifact that triggered a shift in Ángel to find his voice to demonstrate that the status of being smart was indeed within him.

Jessica

Of the four focal students, Jessica seemed to be the most studious, but her sense of agency was the most hidden. When I asked Jessica to describe what she was like before entering WNT she stated that whenever she had to present anything in class to her peers, "I would be super red, red, red" (Jessica Interview 3/31/17). This statement characterized her previous insecurities and showed how stressful it was for her to go before her peers. She admitted that she was intimidated by working with others, and like Anuel, Jessica stated during their focus group interview that she didn't like working with others and preferred to work on her own (Focus Group Interview 5/31/17). Like Ramón, Jessica never signed up to be part of WNT. Given her shy personality, the fact that she did not know that WNT was a new program to which she could enroll was in line with her reserved persona of not seeking out information. When she discovered on the first day of school that she was not in the volleyball class, she wasn't sure how to remedy the situation. Most students would immediately turn to the counselor, but Jessica was hesitant to ask for help despite the fact that she needed a schedule change. When she informed her coach about the scheduling mishap, the coach directed her to the counselor. It was then that the counselor informed her that they could not change her schedule because she was part of

WNT and during first and second period she needed to be in the WNT English/World History class thereby placing her in Volleyball during last period. She said she wasn't sure how she got into the program, but accepted the word of the counselor that it was a good program and returned to class (Jessica Interview 2, 9/13/17). GEO acknowledged that Jessica was a good student, but he said the WNT teachers were concerned about her reserved nature and were working to draw more out of her. She didn't often speak out on her behalf and didn't always turn to her teachers when she needed to. During one of the TELPAS writing assignment, she was very frustrated as she kept erasing her writing and exhaling in exasperation as she felt she was not correctly addressing the topic. I asked her what was wrong and if I could read her paper. She said her paper was wrong and didn't want me to read it. I told her that she could go to her teacher for help, but she said that she was just going to turn it in as it was. I couldn't understand why she didn't just go to her teachers, but as I got to know Jessica it was clear that her timid nature often prevented her from seeking help as she was too shy to initiate the action that could alleviate her stress. Maria in Bartlett's study (2008) did everything she could to avoid being cast as a struggling learner. Maria aligned herself with the best students and took advantage of teachers that she felt would support her as a learner. Like Maria, Jessica needed to advocate for herself by talking with her teachers to ensure they could support her learning. Because of Jessica's hardworking nature, she eventually adapted well and took advantage of the PBL approach offered within WNT despite the fact that she struggled to ask for help from her teachers. She seldom joined her friends during the daily classroom breaks because rather than go to her teachers for help, she chose to stay behind to try to figure out her assignment (see Figure 5.4.)



Figure 5.4: Jessica during the break

The above photo very much characterized Jessica as the conscientious student who constantly worried about her academic performance and the performance of her team mates as well.

Because she was always concerned with her performance and her grades, she used the break time to ensure her work was on par, which elevated her status as a good student. Although she was conscientious about her grades, she didn't always exert herself in the classroom. Because of her quiet demeanor, when Ramón and Hadie were often arguing, Jessica would often just listen to the banter between them rather than intervene. Since her concern for what was due and when

never left her priorities, her status as a team leader started to slowly evolve as she began to monitor her team's progress. Jessica's mothering Discourse toward Ángel and even Hadie was a reflection of her concern about assignments being completed within a timely manner. When she often asked Ángel if he was almost finished, it reflected her concern that as a team they might not submit their work on time, "¿En dónde vas? Ya mero acabas?" (*Where are you? Are you almost finished?*) (Field notes, 3/1/17). Ángel always acknowledged her concern, sometimes by nodding his head that he was ok and almost done. Because Ángel accepted her nurturing Discourse, it may have empowered Jessica and strengthened her sense of agency and status to continue monitoring the progress of her team without having to turn to the teachers for help as she was transforming into a leader. I asked Jessica to describe a time when she felt really great about one of her projects. Although she did not reference any specific project, she referenced an identity shift and attributed that change to her participation in WNT.

- 1 [W]hen I first started coming to this new program I was really shy.
- 2 And now I'm improving and
- 3 it's going to help me out in the future with jobs, interviews and all that....(Jessica Interview, 3/31/17).

Jessica characterized what she was like before entering WNT in line 1, but recognized that because of WNT she was changing as referenced in line 2. Always a conscientious learner, Jessica understood the greater good in her enrollment in WNT. In my second interview with Jessica, she explained why being a good student was so important to her. "My goals for high school are that I want to graduate top 10 %, from there get some credit from college... I do want to [go to college] but if I can get to the police academy [first], I think that's better. Just study more and then I can be an FBI because you have to have your Master's Degree (Jessica

Interview, 9/13/17). She had established clear goals after high school as she specifically listed her future job as an FBI agent. Jessica identified that by improving her communication practices and keeping up with her studies, she would be able to reach her goals. As uncomfortable as she was about working with others or asking the adults for help, she realized as stated in line 3 that what she was learning in WNT would help her in the future as a college student or law enforcement officer. But Jessica's hesitation to ask for help from her teachers was short lived, and her developing transformation was somewhat forced upon her due by an unexpected pivot beyond her control. When Ramón and Hadie announced that they were going on vacation and would not be able to present their Mountain Vista project to city council, the burden of the presentation fell on Jessica. Jessica's concern and frustration about their project presentation was evident as she held back tears when she informed ELA that two of their four member team would be absent for the presentation. Both Ramón and Hadie immediately started showing her what they were doing so that she could fill in for them during the presentation, adding further stress and pressure to Jessica. Feeling helpless as a result of a pivotal event that essentially affected the entire team, Jessica did something that was out of character for her; she went to her teachers for help in an attempt to save their presentation. ELA reflected on how Jessica handled this crisis:

Stanza 1 (Explaining her frustration)

- 1 ELA: A day or so before they presented [to city council], Jessica was crying. She was frustrated, she was angry. "These people are taking off on me, these people are taking advantage of me, I have to do this presentation, and it's so much work."

Stanza 2 (Explaining negative consequences)

- 2 She comes to me and she's crying and she's frustrated. "I'm not going to do well, I have to do all this work, I have to do it in English."

Stanza 3 (Finding relief)

- 3 And all these things piled up on her and I said, “You know, don't worry about it. Let's go through the PowerPoint - what can we do here, what can we do here, how can we do this?” Within 15 minutes, she was smiling again because she had a plan.

Stanza 4 (Moving forward)

- 4 She knew what she had to do. That little girl, she's really come into her own in many ways (Teacher Interview, 4/12/17).

Jessica's frustration seemed to stem from the realization that if two of the team's strongest members were absent for the final presentation, their project would be severely compromised. Although she never verbalized her frustrations with her team, she clearly expressed to ELA in Stanza 1 that she felt she was being abandoned by her peers. But the issue behind her frustration as stated in Stanza 2 was not only that she felt she was being abandoned, but because Ramón and Hadie were leaving, the team would not do well on top of having to do the presentation in English. With a little comfort, encouragement and project adjustments from ELA, she was back to her studious and conscientious self. The fact that two of her teammates were going to be absent for the culminating project of a complicated PBL unit resulted in a pivot that forced Jessica to act by doing something that she would not normally do – go to her teachers to save their presentation. GEO stated that Jessica realized that she needed to cover the voids left by Ramón and Hadie so that their presentation would not suffer and that added tremendous pressure to her already distressed state. But because Jessica recognized her limitations, her sense of agency and her status as a conscientious student moved her to seek help from her teachers to rectify the feeling of overwhelm that she was experiencing.

At the culmination of *The Odyssey* project, the teachers gave awards to several of the students. They described a student who had “taken a project to heart,” referencing how Jessica

handled the Mountain Vista project (Field notes, 5/31/27). The teachers recognized her efforts for not giving up and celebrated the fact that she learned to use her language and literacy practices to ask for help which further solidified her status as a good student among her peers. When I asked her about how she had changed over the course of the school year, she immediately stated that what improved the most was her level of confidence. She remembered turning red in the eighth grade whenever she had to do a presentation, but now she said that if she had to present to her class, she could do it easily. Her struggle before was her own. Now if she struggled with any part of a presentation, she knew that she could go to her teachers for help and guidance to complete the project. Her newfound status as a good presenter was reflected in her confidence as she showcased her projects before her peers. “Now I feel like I’m more calm, and I have the confidence to speak” (Jessica Interview, 3/31/17). Jessica’s transformation resulted from a pivot that caused her tremendous grief, but at the same time, that event helped her develop a new identity where she learned to engage her sense of agency and use her status as a good student to gain skills that could help her in school and beyond. So many people have struggled to speak publically, and the fact that Jessica recognized her shortcomings and worked to overcome them, was a testament to embracing her new identity as a student learning to improve herself.

Hadie

Hadie from the onset showed a confident level of agency in her abilities as a student. The fact that Hadie was a member of the Wilson High School Mariachi group may have contributed to her outgoing nature, as they often performed for pep rallies or civic functions around the community. Her connection to her friends was strong, so strong that sometimes it was a hindrance to her learning. Her teachers mentioned that they sometimes had to pull her away

from her friends so that she could concentrate on her school work (Teacher Interview, 3/3/17). As far as the PBL driven school work of WNT, Hadie stated that she initially didn't like working in groups. This was an unusual statement for an active and social student like Hadie. Because the members of the student teams were assigned by the teachers, Hadie was not always grouped with her friends, therefore possibly justifying the fact that she did not initially enjoy group work. Outside of the classroom, Hadie was an active member of the school community and was one of the students who applied to become part of WNT during her 8th grade year and was the only one of the four focal students that did not carry a LEP code. I asked Hadie to describe what she thought people outside of WNT were saying about the WNT program.

- 1 Hadie: ...some students don't like WNT because the WNT kids feel like they are better than others.
- 2 NP: Are you?
- 3 Hadie: Well, I guess we are, but we are really the same. We *are* different. (Field notes, 4/7/17).

Her response was an interesting juxtaposition of the dual identity she must have been feeling as a member of WNT. She stated in line 3 that the students of WNT were different from the general population referencing their status within the school, but also qualified that statement by saying, "but we are really the same" referencing to the solidarity she shared with the students from the general population. But she ended her statement in line 3 by emphasizing once again their status by stating that the students of WNT were indeed different from the other students even though they all came from the same student population.

During the Mountain Vista project, Hadie was assigned the role of task manager, which ultimately functioned as a pivot that changed her as a student. I don't believe that her assignment as task manager was coincidence because the teachers were aware of the fact that she

was a very smart student who could apply her knowledge to any task. The fact that Hadie was the team's task manager meant that her role was to ensure that everyone was completing their assigned tasks, a role that provided her with status and power over her peers. She recognized the status and power that came with the role of being the team's task manager. "Since I was the task manager, I was in charge of making sure that everyone was doing their job, so I was pretty much feeling good about everything" (Hadie Interview, 3/31/17). The jobs assigned to the teams during the Mountain Vista project were complicated and multi-faceted as the students had to complete the research tasks, come to a team consensus about their position - either for/against drilling and fracking in Mountain Vista, create a graphic organizer to illustrate their position and develop a presentation for city council to persuade them to accept their position for/against drilling and fracking in Mountain Vista.

During *The Odyssey* project, Hadie had a similar leadership role as she was the co-director for her group. Her appointment to the leadership role was clearly intentional. She proved to be a strong leader during the Mountain Vista project, and her teachers surely were confident these leadership skills would transfer to *The Odyssey* project. What was most significant, however, was that Hadie now no longer sought the solidarity and comfort of her friends before engaging in a task. Her role as task manager was important because her team's success depended on whether or not, through her leadership, they completed all their PBL tasks. Her priority shifted where she was now focused on the instructional task rather than prioritizing being with her friends. Her confidence as a leader was evident. Although her title was co-director, she was in many ways the director and GEO's right hand as, even he, often deferred to her about what needed to be done next (see Figure 5.5).



Figure 5.5: Hadie and GEO discussing the next scene in *The Odyssey*

Because of her organization skills, GEO would often turn to her and ask her what was next or what else needed to be done or what was missing from the scene thereby rendering her with status and power that was evident to all the students. Her peers also learned to turn to her for

support, contributing to Hadie's status as a leader or as someone they knew would help them. Hadie made sure that all *The Odyssey* reading parts were assigned to the students and never favored her friends, as her priority was ensuring the assigned actors were best for their film. One day as they were preparing for filming, Hadie was once again reviewing her notes and emphatically stated to her team, "Walter va 'ser Zeus" (*Walter will be Zeus*). Her declaration was definitive as she knew that Walter acting as Zeus would not only get the job done for their filming, but Walter could very effectively embody the character of Zeus. The Hadie that once prioritized her friends may not have chosen Walter as Zeus, but Hadie, the co-director, knew that the best choice for their film was to use Walter. While the students were discussing who needed to be in the scene, one of the other students reading the part of Helios came up to Hadie and started practicing his lines. He struggled reading the lines, "These sailors ate my cattle." Hadie immediately redirected him, "Your *food*, *para que no digas 'cattle'*" (*Your food, so that you don't have to say 'cattle'*). The student continued to struggle with his lines. She looked at him in a show of power and status and asked:

- 1 No quieres ser Helios? (*Do you want to be Helios?*)
- 2 Student: Si yo lo hago (*Yes, I'll do it*).
- 3 Hadie: Ay bueno (*Ok, good*) (Field notes, 5/18/17).

Hadie used her language and literacy practices to show both solidarity and status. When helping the student struggling to say his lines, she showed a clear sense of solidarity by giving him the alternative word *food* instead of *cattle*. But when she saw that despite the adjustment, he was still struggling with his lines, her role as co-director prioritized the project, and she asked him in line 1 if he in fact wanted to read the part of Helios. When the student acknowledge in line 2 that

he did want to continue reading, Hadie's response, although simple, *Ay bueno* ("Ok, good") was more of an implication to get the job done.

Because of her methodical thought processing and because the teachers noted the evidence of her organization skills, they used her talents to complete the PBL projects in an efficient manner. Because GEO often deferred to her, the perception from the students was that they too could go to her for help adding to her status as the task manager/co-director. The fact that she was assigned the role of task manager in the MVP was the pivotal event that triggered her sense of leadership to focus on the task rather than her friends. Despite the fact that she missed the final MVP presentation, due to her leadership skills as the task manager, the team was able to successfully present to the city council. Her strong sense of leadership transferred to her work on *The Odyssey*. Very intentionally, she was assigned the role as co-director because GEO knew that she was organized enough to get the job done. Her title of co-director gave her a certain status and power, and her friends now understood that her priority was in completing the film and not favoring her friends. The pivotal event started with the teachers assigning her the role as the team's task manager. She embraced that role and became an effective leader who was now driven by her ability to successfully complete all PBL tasks.

Recognizing the Transformation

With the implementation of the WNT program, the students started to embrace a transformative change within their identities that was reflected in their actions as well as in their language and literacy practices. Many of the WNT students had identified at some point as students who did not know how to become a good students. Because of fortuitous and pivotal events, each of the four focal students engaged in various activities that ultimately led to a transformative identity shift. As the students collaborated with their teams to complete their

PBL projects, they developed a sense of solidarity to support the collective efforts of the students within WNT. The collaborative practices of the team created opportunities for each of the focal students to enact their own form of agency in an effort to strengthen their team's efforts. When Hadie and Ramon announced to their team that they would miss the MVP presentation, it was evident that the presentation would be compromised with their absence. When ELA stopped by the team table to check on their presentation progress, Jessica quickly announced that Ramon and Hadie would be absent for the presentation. As ELA assured the team that Jessica that could successfully lead the presentation, Ramon kept his focus on the teary eyed Jessica stating, "I know she's nervous, I can see it" (Field notes, 3/8/17). The team dynamic emphasized the importance of collaboration and cooperation so much so that Ramon announced an on the spot declaration that he would forego his vacation to stay for the presentation. Working in teams to complete their projects was a shared practice that reinforced their membership within WNT.

The students used their language and literacy practices on various levels to align themselves in solidarity with their peers as Hadie stated "...we are all the same." This statement rang true because the students of WNT were no different from the students in the general population. Additionally, because the students came to embrace the fact that the work they were doing in WNT was different from the work outside of WNT, they also started to accept that their status within the school was changing. The students of WNT were able to use their language and literacy practices to identify and verbalize how they recognized that their program was different from the classes outside of New Tech. Ramon was able to clearly express how classes outside of WNT were in rows, but in WNT the students were seated at tables working in groups. The general population was still learning in the traditional didactic manner of teaching, while the students of WNT were learning via PBL.

The situated practices established within WNT reinforced how the students were different from the students of the general population. The expectation the WNT students held was that their instruction would be based on team collaboration, and their classroom was situated to promote that kind of group effort. If the teachers replaced the tables with traditional desks, very likely the students would question the change. The general population of students recognized that what was happening in the WNT classroom was different from the regular classroom instruction. Jessica stated that her friends often asked her what the students of WNT doing as they peaked into the WNT learning environment to see everyone working in teams (Field notes, 2/22/17). Jessica mentioned that she felt that the students outside of WNT were often jealous “son envidiosos” (Field notes, 4/7/17) of the fact that all the content learning was project based. Jessica’s sentiment was echoed by Ramon who simply stated that the other students were jealous because they did not have the privilege to learn within a group setting (Field notes, 4/7/17). The classroom setting and the mode of instruction served to reinforce the figured world identity that was embraced by the WNT students.

Towards the end of the semester, as the students were now visibly demonstrating and embracing the figured world identity created within the WNT program, I was curious to know how they felt about their learning within WNT. I wanted to hear the reflections from the focal students, but I was curious to know how other WNT students felt about their PBL classroom. I arranged the focus group interview to include the four focal students along with the four other students whom I had identified as active participants in the New Tech program. During the focus group interview, I asked the all the students to reflect on what they learned most from WNT. Hadie confirmed that what set them apart from the students outside of WNT was that they had to learn how to collaborate, but Anuel best summarized their struggle regarding collaboration:

Stanza 1 (Before WNT)

- 1 Anuel: I came here without knowing nothing - how to work in groups.
- 2 I didn't like all of that....
- 3 Alice: In the beginning...we didn't know what to do since this was a new program.

Stanza 2 (What they learned)

- 4 Jessica: What I learned was that I couldn't work in groups.
- 5 It was difficult for me.
- 6 I wanted to do everything by myself.

Stanza 3

- 7 NP: Were you that way in the beginning?
- 8 Jessica: Yes

Stanza 4 (Acknowledging what they didn't know)

- 9 Anuel: It's because we were so used to working by ourselves (Ángel nodded in agreement)
- 10 that we couldn't handle bad kids or good kids.
- 11 We didn't know how to collaborate.

Stanza 5 (Introduced to new concepts)

- 12 Hadie: In the beginning of the year we were like what is collaborating, what is agency?
- 13 Then these teams - that kid doesn't work, why would I want to be in a team with him?
- 14 We used to have an attitude (Focus group interview, 5/31/17).

Anuel stated in Stanza 1 that they were used to working by themselves because up until now, the only form of instruction they had experienced was based on a teacher led format, so consequently they didn't know how to work in groups. The students recognized that the expectation was that they needed to work with each other in order to effectively complete their PBL tasks. But admittedly they struggled to work with others as stated by Jessica in Stanza 2 because it was difficult. What the students lacked as they entered WNT was a true sense of solidarity as echoed by Jessica in line 6. They didn't realize that their PBL tasks would be greatly facilitated and strengthened by engaging in the collective efforts of a team. Hadie summarized their eventual transformation as learners in line 14 reflecting that they used to have an attitude that prevented them from working in solidarity within WNT. Once the students understood that the approach of project based learning was that the assignments were to be completed by a team, only then did they acquire a sense of solidarity with their peers to collaborate effectively in order to complete their project tasks.

Epilogue

As the academic year was drawing to a close, I noticed that the WNT faculty were already starting to prepare for year two of the program. Their inaugural year was a learning experience for students and teachers alike, so it was exciting to see them planning changes that would improve their program for the next year. I asked Ms. Smith when she anticipated receiving the student state test scores. She mentioned that they normally received the scores in June, and admittedly I was somewhat disappointed. By that time, I would no longer have access to the students to discuss their reflections to the testing as they would be on their summer break.

The purpose of this epilogue was to include information relative to the WNT program that showed how the faculty took into account the history of Wilson High School in an effort to

ensure a positive learning experience for the WNT students. A week before the school year ended, the state released the preliminary test scores. Although this study focused on how the students used their language and literacy practices to complete their PBL units, I felt that an epilogue was appropriate to show how the students performed on the state exam.

Changing the Status Quo

As the school year progressed, the students demonstrated figured world characteristics that were unique to WNT as they learned to work together as a cohort throughout the school year. The expectations of their teachers regarding the students' actions and shared practices reinforced the figured world identity that elevated their status within the campus as not just students on campus, but they were WNT students. Additionally, the students' language, literacy and academic progress were also critical components that separated the WNT students from the general population Wilson HS. Their PBL instructional focus required them to complete various modes of writing such as technical or creative writing that challenged the students, and because all their projects included some kind of presentation, the students had to be able to orally communicate their ideas to others. But, a historical fact surrounding Wilson HS was that in previous years, many students did not engage in challenging academic course work, not because it was not offered at Wilson, but because the students did not remain enrolled in school. The drop-out rate of Wilson HS exceeded both the state and district averages, propelling the faculty of WNT to take action to ensure that the students of WNT did not fall victims of the drop-out rate. Below is Table 5.1 comparing the drop-out rates in percentages for the state, district and school starting with the class of 2013 and ending with the class of 2016.

Table 5.1: Drop Out Rates 2013-2016

Drop Out Rates for the state of Texas, Borderland ISD, Wilson HS			
	Texas	Borderland ISD	Wilson HS
Class of 2016	6.2	9.6	22.5
Class of 2015	6.3	10.5	19.4
Class of 2014	6.6	10.1	13.2
Class of 2013	6.6	8.7	11.5

While the dropout rate for the state was reduced from 6.6 to 6.2 from 2013 - 2016, the district showed increases in the drop out percentages through 2015 then they dropped in 2016 from 10.5 to 9.6. But the dropout rate of Wilson HS was nearly three times the state average and double the district average in 2016. But most alarming for the teachers of WNT was that the dropout rate for the campus continued to increase calling the teachers to action to reduce that campus percentage. The campus dropout rate was part of the negative public perception ascribed to the school. When GEO spoke to me about organizing a graduation committee, he stated that he felt the teachers owed it to their students to ensure they graduated from high school. He explained that their expectation of the students was to teach them to hold each other accountable for completing their PBLs, so as WNT faculty they had to create protocols to ensure the WNT students graduated from high school (Field notes, 4/27/17).

Graduation Committee

In one of my early meetings with Dr. Jones the semester before I started to collect data, he stated that it was difficult for Wilson High School to move forward in a positive direction

because every reference to the high school students was associated with the district's cheating scandal. The fact that Borderland ISD supported a NT program at Wilson HS was the trigger that initiated the transformation this community and school needed. Because the students of WNT all shared the same teachers, the WNT faculty were able to formally or informally meet to discuss not only the progress of the PBL units that the students were working on, but the teachers also discussed the progress of individual students. Part of the WNT faculty dialogue included developing what GEO called the WNT Graduation Committee or what the NTN called Project 2020 (Liebtag & Vander Ark, 2017). The graduation committee assigned students into teams of four and each student team was monitored by a WNT faculty member. The goal of the committee was to provide a support system to the students via small groups so that they could turn to one another for help and support as they gained credits toward graduation. The monitoring teachers were in constant communication with the students and reminded them often that their long term goal was to graduate from high school. It was made evident to the students that in order to reach their graduation goal, they were accountable to attend class every day and to make sure they were passing all their WNT classes. During the weekly WNT faculty staff meetings, the teachers discussed issues or concerns with their student graduation teams or with individual students. What the teachers ultimately discovered was that the students embraced the accountability Discourse, and they started to monitor each other's progress including attendance and grades. GEO said that the students supported the accountability within their groups, and they even heard that some of the students were calling the parents of other students to express concerns about their peers. The plan was that the students would remain in teams monitored by teachers, with the expectation that the students would continue to hold each other accountable until their graduation (Field notes, 4/27/17).

The graduation committee was significant because the majority of the students of WNT were randomly placed in the program from the general population. To see these students from the general population enact such a serious level of agency by using their oral language and literacy practices to hold each other accountable was a testament to how they were embracing the solidarity of their membership in WNT and how their actions were now contributing to the shared repertoire within their figured world. Their actions in demonstrating accountability, once again strengthened their solidarity as the figured world of WNT and at the same time elevated their collective status within the school community. An identity transformation was visible, but it was not in the hands of the teachers. The transformation was now in the hands of the students as they used their language and literacy practices to not only complete their PBL tasks, but they were using their oral language and literacy practices to monitor the accountability of their own graduation committee. The students now demonstrated changes in their actions that reflected their newfound identities and practices that were more aligned to their new status as campus leaders and learners in WNT.

Test Scores Released

The graduation committee functioned as a pivotal artifact that triggered the students to shift their actions and discourse to reflect the importance of holding each other accountable for their performance in school. The WNT students were embracing the idea that they were different from the students in the general population, even though they essentially were not. But their common practices and shared norms were evidence of a shift in identity that was reflected within and around their classroom learning environment. Luttrell and Parker (2001) cautioned educators in confounding a student's position with their disposition, but even the WNT students started to accept that their disposition reflected that they were not like the regular students on

campus. This identity shift became more prevalent as the students completed their state testing and more so after the test scores were released to the campus.

When it was time to officially test the students for the state assessment, the administration decided to test the WNT students in the gym along with the general population rather than have them test in the WNT classroom. Because of the questions surrounding their performance on the district benchmark test, the school decided that testing everyone in the gym would remove any improprieties associated with cheating. The day after the state test was uneventful as the students resumed working on their PBL projects, but it was evident that everyone was anticipating their scores. Ms. Smith, the assistant principal, spoke to me about how proud she was of the transformation she was noting in the WNT students (Field notes, 5/15/17). She commented on the fact that during the beginning of the year, the students were very hesitant to verbally present their work before their peers. Now as the spring semester was coming to a close, she stated that she felt the students' reservations about public speaking had dissipated as they were now even in the process of filming their own movie version of *The Odyssey*. I explained to her that earlier in the week, Ramón shared his PSAT scores with me, and I noticed that he scored poorly on Expression of Ideas. I commented that this surprised me because Ramón was so organized and eloquent when he led his team's MVP presentation to city council. Ms. Smith pointed out that the PSAT was taken in October and the MVP presentation was in February so she wondered if his PSAT assessment next year would reflect his growth in that category (Field notes, 5/15/17).

On May 23, I received a text from GEO asking that I call him. I was scheduled to be in the classroom the next day, but I called him to make sure everything was ok. I could hear the emotion in his voice as it quivered when he told me that they received the preliminary scores for

the state test. After a deep breath he stated that the students had made significant gains on the test, outscoring last year's scores and out-performing the rest of the student body. He explained that he and ELA were so happy for the students, and they couldn't wait to share the news with the students. The next day, when I arrived to the WNT classroom, I congratulated ELA on the fact that they improved overall from last year. GEO explained that they celebrated especially because the majority of the students in WNT spoke Spanish as their dominant language, and they out-scored the rest of the school on a test using their second language. To meet the accountability standard in a second language was a tremendous accomplishment for second language learners, and the teachers recognized that feat. ELA was reluctant to accept my congratulations and simply stated that there was still work to be done. The WNT algebra teacher walked into the classroom, and I congratulated her on the scores of the students. Her eyes filled with tears and then she paused before she told me that they sat down with each student individually to inform them of their test scores. They only had four students who did not reach mastery in algebra, and they already had an instructional plan to help these students pass the summer administration of the test. The algebra teacher stated that she cried with almost every student when she informed them of their passing algebra score. She explained that for many of them, this was the first time they had passed an algebra test and for some, this was the only test they passed. The faculty captured the emotional revelations to the students on the WNT Twitter feed. Figure 5.6 shows a page from the WNT Twitter feed where they informed the students of their algebra scores.



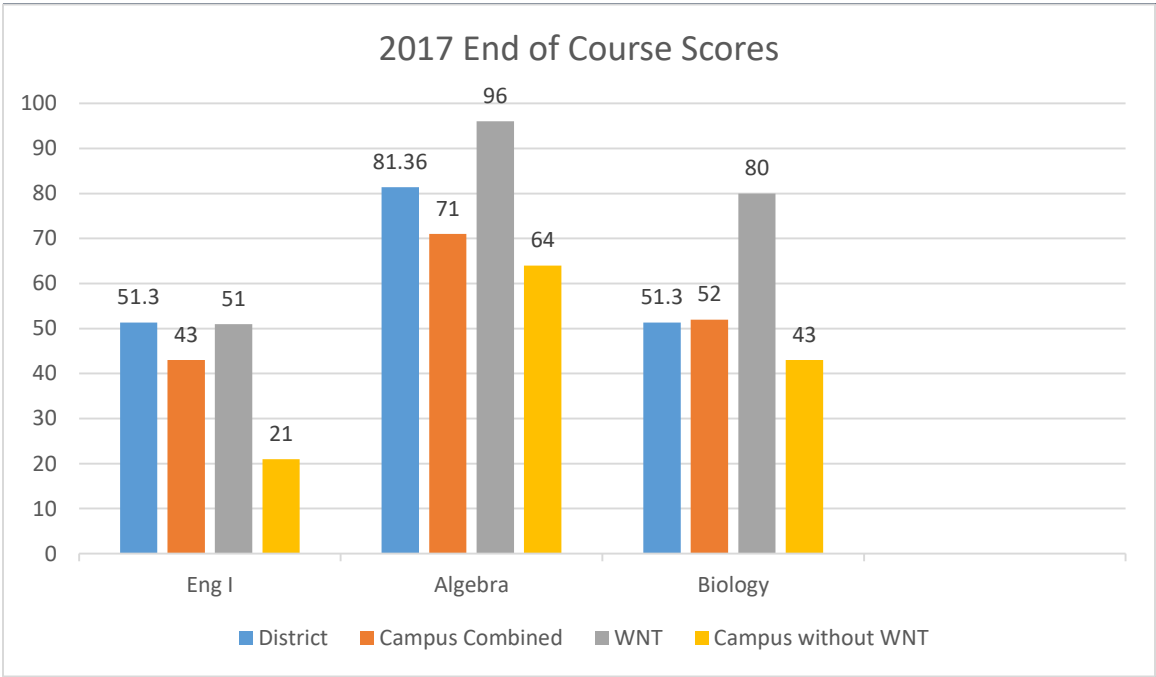
Figure 5.6: WNT Twitter Feed

The algebra teacher posted a caption below these pictures that these were the moments that she would never forget. The elation exhibited by the students was emotional and contributed to their elevated status around campus as those who passed their algebra End of Course exam (Field notes, 5/23/17).

The students had indeed made significant gains in all areas, especially in Algebra where the passing percentage was for WNT was 96%. The scores were especially telling because the

classes that practiced an approach to learning that included collaboration, critical reading and critical writing within a PBL format outscored the students who were receiving a traditional instructional approach to learning. Table 5.2 shows the preliminary, and at the time unofficial, 2017 End of Course scores for the district and campus (Field notes, 5/23/17).

Table 5.2: Preliminary 2017 EOC scores



The table compares the scores of the overall district average, the combined scores of Wilson without the WNT scores. In every category, the scores reflected that the students of WNT were either on par with the district or outscored the district average. The scores also showed that the campus overall benefitted from WNT. The campus combined score including WNT showed significant gains from last year (see Table 5.3), and the campus score excluding WNT was lower with the exclusion of WNT (Field notes, 5/23/17).

Table 5.3: Campus comparison EOC scores 2016-2017

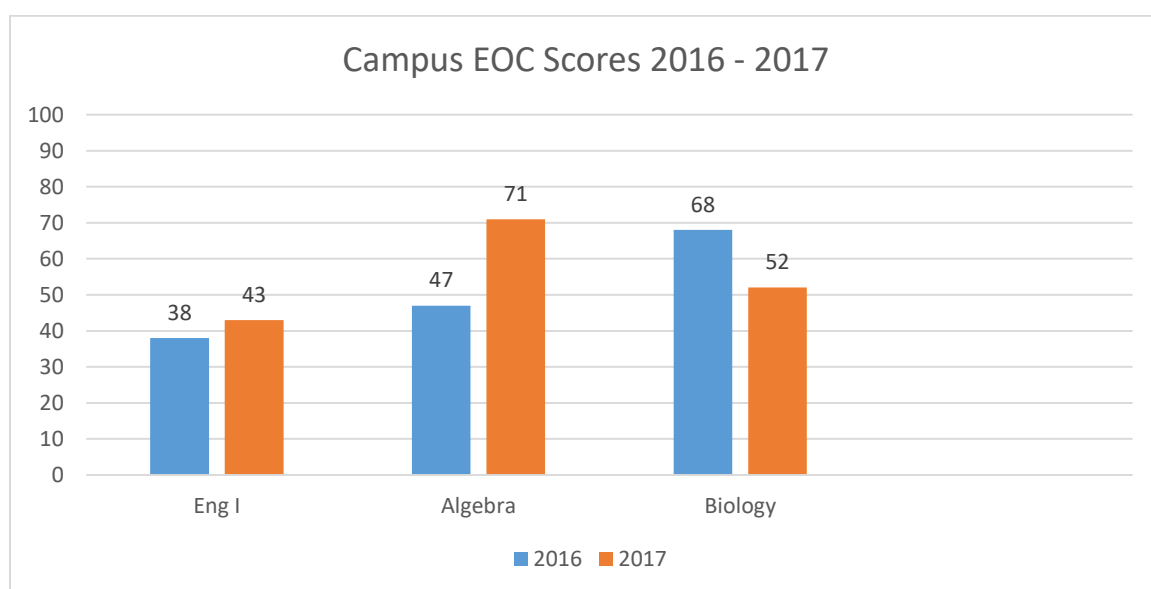


Table 2 shows campus gains in English I and Algebra from 2016 to 2017. The gains in algebra were clearly the most significant. Although the WNT students were at 80% passing in Biology, their combined campus score for Biology in 2017 was 52, which was lower than the 68% passing the year before. While the students of the general population were receiving traditional, didactic, teacher led test preparation, the students of WNT were working in teams and using critical thinking skills and employing critical reading and writing to solve their PBL research tasks. Ramón summed up the differences between WNT and the students from the general population:

- 1 Tienen envidia (*They're jealous*)
- 2 porque en las clases de ellos están en rows. (*because in their classes they are in rows.*)
- 3 Y nosotros estamos aquí en tables en groups. (*Here we are sitting at tables, in groups*)

4 Es mejor para nosotros (*It's better for us*) (Field notes, 4/7/17).

Ramón's statement that the students outside of WNT were jealous was significant because it spoke to the idea that the students of WNT were at a different status than the other students causing the students outside of WNT to feel jealous. Although Ramón pointed out physical differences between the traditional classroom and the WNT classroom in line 2, the physical structure was indicative of the approach to student learning. The difference between WNT and regular classes was echoed in the study by Luttrell and Parker (2001) when they explained the difference between the seminar classes and the non-seminar classes. Like the WNT classes, the students in the seminar classes in the Luttrell and Parker study were actively engaged in the learning process where they were designing activities to represent their learning. The non-seminar students, much like the regular student population at Wilson HS, were enrolled in classes where they were sitting in rows listening to a teacher driven lesson where the teacher was telling them about the literature rather than allowing them to discuss it (Luttrell & Parker, 2001). Because the WNT students, like the seminar students, worked collaboratively to solve their PBL tasks, the tables within the classrooms were necessary artifacts within the learning environment that contributed to their learning. Because the students in the general population were not learning through project work, they were seated in individual desks arranged in rows. For that reason, the traditional classroom with the rows of student desks were typical for the teacher led instructional approach.

After the students received their state scores, I asked some of the students during the focal group interview to reflect on their test preparation. Hadie quickly compared how their teachers were different from other teachers on campus.

- 1 Other teachers around the campus just lecture the kids
- 2 They wouldn't care if a student got it or didn't,
- 3 if one kid was absent or not.
- 4 Our teachers actually cared for us,
- 5 they actually cared enough to make sure that everybody passed the test. (Focus group interview, 5/31/17).

Feeling positive about her own performance on the state test, Hadie stated in line 1 that teachers outside of WNT resorting to didactic lecture to preparing their students for the state assessment. Her accountability Discourse surfaced as she referenced how her teachers emphasized the importance not only of “getting it,” but stressing to the students that daily attendance was important in line 3. She summarized her reflection about the state test by stating that they passed the test because the WNT teachers cared enough to ensure that everyone passed the test. Because the WNT teachers made sure their students were prepared for the state assessment, the students performed at the level that was expected of students in the WNT program. As Hadie stated her justification for their performance on the state test, several of the students nodded their heads in agreement crediting the work of their teachers. Melanie then switched the focus of the discussion from the teachers to the students. She stated that during the test, it was easy to identify which students were from New Tech and which ones were not.

- 1 During the test for example, the NT students asked for all the resources such as highlighters, dictionary, thesaurus where
- 2 the students not in NT didn't.
- 3 We took the test like the teachers taught us. We also took the entire time to finish the test.
- 4 Some of the other students not in NT finished in an hour! (Field notes, 4/7/17).

The distinction Melanie cited between how the WNT students tested as opposed to how the students from the general population tested was significant because all the students were essentially from the same general population. The only accountable difference between the students in WNT and those not in WNT was in the approach to testing that resulted from the instructional format of the classroom. Melanie stated in line 1 that their teachers prepared them for the test by making sure the WNT students used all available resources for the test such as dictionaries, thesaurus and highlighters. In line 2 she summarized that they outperformed the students from the general population because the other students were not taught to use all available resources during the test. While the WNT students used the available resources during the exam, the students from the general student population simply did not and she added in line 4 that while the WNT students took their time to complete the exam, some of the other students finished the test within an hour and not taking advantage of the three hour time frame. The students who used the available resources and who took their time to complete their test achieved the status of being fully prepared to take the state assessment. The students who did not use the available resources and finished the test quickly were clearly not prepared by the WNT teacher and therefore did not earn the status of testing like those from WNT. Even during a controlled testing environment, the students recognized that they were different from students outside of NT, and their shared repertoire was a visible indication of their membership in the WNT figured world.

I asked the focus group students to reflect how the students at Wilson HS were perceived by others. I also asked them to reflect on how their End of Course scores were perceived by others.

Stanza 1

1 Melanie: We have a really bad reputation in this district.

Stanza 2

2 Alice: I think that is very stereotypical because
3 they expect that because of where we live, they expect us to be these drug dealers and
 gangsters with no education.

Stanza 3

4 Hadie: The truth is that if they [those who hold a negative perception of Wilson High
 School] would only come over here and not talk without knowing,
5 they would be totally amazed...
6 Our algebra teacher was telling us that another school wanted our help.
7 It actually makes me mad
8 because these other schools wanted the help of the cheaters and *cholos*, the drug addicts
 and the drop outs...
9 How could these *cholo* guys, the ones that do drugs, the drop outs, how could they have
 the best scores....?

Stanza 4

10 Alice: I personally want to change the stereotype that was placed among us for those
 who feel we're not educated, and
11 we want to prove them wrong (Focus Group Interview, 5/31/17).

The students' Discourse regarding their public perception presented a unified solidarity in wanting to prove that they were not the typical stereotype of cheaters and *cholos*, a negative status to which they did not identify and opposed. Melanie stated the problem in line 1 as they

understood it, and that was that their school had a bad reputation. Alice then, very clearly, explained the unsubstantiated stereotype that because they lived in the south side of town, an economically depressed area, people assumed that everyone there were “drug dealers and gangsters with no education.” I looked over at Hadie during this exchange and noted that she was starting to get angry. With her fists clenched, she kept looking up to the ceiling almost in an effort to calm herself. She finally expressed her anger in Stanza 3 where she emphasized that people who didn’t know the students at Wilson HS were making assumptions about them because they were talking “without knowing.” In line 5, she stated that if these people knew the students of WNT, they would be “totally amazed.” As Hadie started to calm down, she informed the others of a conversation that she had with their algebra teacher. The algebra teacher told Hadie about a meeting she attended with other math teachers from the district after the End of Course scores were released. Apparently, the other teachers had already seen the gains made by the students of Wilson HS on the state exam and likely asked the WNT teachers to explain what they did to improve their scores. If those strategies worked successfully at Wilson HS, a school that struggled academically in previous years, then surely teachers from around the district were curious as to what approach was taken by the Wilson teachers to bring such dramatic improvement. Although this may seem like a compliment to the effort of the teachers and accomplishments of the students, Hadie’s tone sounded somewhat resentful that other schools asked for help from the school with the reputation of having “cheaters and *cholos*, the drug addicts and the drop outs.” She makes her point in line 8, however incredulously or even sarcastically, wondering how other schools could resort to asking for help from a school with a bad reputation. Alice responded to the conversation in Stanza 4 with calm and reason and simply stated that she personally wanted to change the stereotype that the general public

believed. She summarized the conversation and the sentiments of her peers as they nodded in approval and solidarity when she said in line 10 that “we want to prove them wrong.” United in solidarity, the students spoke eloquently that their efforts were reflected not only in the completion of some very challenging PBL units, but now their state scores showed that the students of Wilson HS were competent students with the capacity to learn and thrive. The Wilson students were finally starting to gain some of the academic capital that escaped them in the past. With the academic capital came cultural capital because now the school joined the rest of the schools in the city that all met the state’s accountability standard. The students were starting to believe that a transformation was in the making, and their identity was shifting from cheater and *cholo* to that of a successful student. Their End of Course scores functioned as a pivot that shifted the students from the figured world of cheaters and *cholos* into another realm or figured world status as high performing students and successful students. The next section will show how the focal students used their language and literacy practices to unite in solidarity to ensure student success and how each focal student demonstrated an identity transformation as they reached the coveted status that embraced the core values of WNT.

Conclusion

This chapter addressed the sub-question that asked: In the context of the figured world, how do ELLs demonstrate solidarity and status through their language and literacy practices? The first part of this chapter provided contextual information on the community surrounding Wilson High School and how the school initiated recruiting efforts to draw students into the WNT program. Background into the district cheating scandal was presented to illustrate how the students of WNT unwillingly entered the figured world of cheaters and *cholos*. The burden carried by the students was that their school was perceived as having a lower status because it

was part of a district that was affiliated with a cheating scandal before they enrolled in high school. The idea that the students at Wilson HS were characterized as cheaters was still an identity that the students were trying to shed, or as Alice said that it was a stereotype that she wanted to fight. Each of the four focal students used their language and literacy practices to fight the stereotype of cheaters and *cholos* to elevate their status as students and citizens of their community. The students dedicated themselves to completing their PBL tasks with fidelity and all of them stated they were different because of the opportunity afforded to them to learn how to collaborate with others through WNT. The learning environment in the WNT classroom functioned as a mediating artifact that shaped how the students used their language and literacy to align their identity to solidarity and/or status. All of the students experienced some kind of pivot that shifted or altered their identity and learning trajectory (see Table 5.4).

Table 5.4: Before and after the pivot

	Before	Pivot	After
Hadie	Strong student, finds comfort in the solidarity of her friends.	Assigned as task manager for Mountain Vista Project. Assigned as co-director for The Odyssey.	She embraced her leadership skills. She organized her thoughts on paper, became the “go-to” person.
Ramón	Loud, abrasive. Sold burritos to earn money for himself and his family.	Both he and Hadie were going to miss the final Mountain Vista Presentation.	Rather than go on vacation he stayed to help his team successfully present.
Jessica	Shy, timid, reluctant to ask for help.	Without Hadie and Ramón, the Mountain Vista presentation would fall on her shoulders.	She turned to her teachers for help to ensure her team had a ready presentation.
Ángel	Shy, timid often did not engage with others.	Ramón was absent when they asked for a graphic organizer team leader.	Ángel successfully led his team to create the graphic organizer and showed his strong academic skills.

Hadie, already a confident and smart learner, was assigned leadership roles that functioned as pivots that showcased her sense of organization. She learned to prioritize her projects rather than seek the comfort of her friends as she worked to successfully complete her PBL tasks. Her obvious sense of organization and leadership skills were valued by her peers and even by her teacher which allowed their projects to be completed in a timely manner. Jessica, although naturally quiet and reserved, and although she was very conscientious of her grades, often hesitated to seek help from her teachers. Her dedication to her team's effort was tested when two of her team members announced that they would not be able to present their final project. This literacy event functioned as a pivot that forced her to turn to her teachers for help and support despite the fact that she may have resisted turning to them in the past. Irving, also quiet and reserved, took advantage of an uneventful request to lead his team to create a graphic organizer. This singular event functioned as a pivot and brought out his voice allowing him to author his PBL projects to demonstrate that he had was smart and had embraced the idea of being smart, of being a good student. The most stunning transformation was Ramón's. When Ramón and Hadie announced that they would be absent for the final Mountain Vista presentation, their team went into a downward tailspin. The mediating pivot for Ramón was realizing that his team would suffer tremendously without him. He decided to forego a family vacation to stay with his team so that they could present their project. As someone who often focused on his own needs, his actions showed that he not only was concerned about his team's performance, but he was willing to sacrifice personally to support their efforts.

The goal of this chapter was to illustrate how the language and literacy practices of the ELLs reflected a sense of solidarity and status within the figured world of WNT. The findings of

this chapter were connected to the intricate relationship between literacy and identity. Because the students of Wilson HS were considered economically disadvantaged and because they were enrolled in a district where administrators were caught inflating the district's accountability rating, the WNT students enrolled in high school with an ascribed identity that reflected that they were either gang members/*cholos* or cheaters. The findings of this chapter revealed that through the lens of Figured Worlds (Holland et al., 1998), the students started to not only embrace their membership in WNT, but they came to embody the practices and norms of WNT consistent with the theory of figured worlds. The data also illustrated that the students were aware that Wilson HS had a collective negative reputation due to consistently low academic performance over the years. When the students reflected on their ascribed identity, their languaging practices showed resentment and even anger that the narrative surrounding their school did not accurately represent who they were. The findings of the study revealed that as their language and literacy practices started to change, so did their developing identities within their figured world. As members of the WNT figured world, the students came to embody that they were different from the students in the general population, and they came to accept that WNT changed their status among the general population of students. As the students showed significant gains in the End of Course state exams, the identity shift of the students was realized and that realization was reflected in their languaging practices.

This study sought to understand how the oral and written interactions of the students contributed to their academic language development as well as how their languaging practices reflected solidarity and status within their figured world. The learning environment within the figured world of WNT served to mediate student learning as it provided the students with opportunities and space for them to engage in academic languaging practices that demonstrated

their solidarity as students of Wilson HS and reflected their status as high performing learners within WNT. Chapter six presents a detailed discussion on the findings of this study along with implication to research, theory, policy and practice.

Chapter 6: Findings and Implications

This study examined the language and literacy practices of ELLs within a PBL classroom setting at an under-resourced high school located on the US/Mexico border. Using sociocultural theories pertinent to language and literacy, I was able to understand how the WNT students intentionally used their translanguageing not only to express meaning, but to demonstrate their solidarity to their peers and how they assumed their newfound status as members of WNT through their language and literacy practices. I wanted to understand how ELLs used their translanguageing practices to negotiate meaning and comprehension as they worked to solve their PBL tasks. Using the seminal study, *Growing Up Bilingual* (Zentella, 1997), I applied the linguistic exchanges identified by Zentella in her study in a more thematic approach to the language and literacy practices of the students of Wilson New Tech. The students of WNT displayed examples of *in the head*, *out of mouth* and *on the spot* linguistic exchanges (Zentella, 1997) as they collaborated to complete their PBL projects. Zentella (1997) stated that the code-switches exemplified by the participants in her study were intentional and purposeful. Deliberate linguistic exchanges were also evident in the language and literacy practices of the WNT students. Pertinent to the developing language and literacy practices of the students, I applied the theory of Figured Worlds (Holland et al., 1998) to develop better understanding of how their membership in WNT was connected to their language and literacy practices. The first section of this chapter includes a discussion of the three main findings of this study. The following section focuses on the implications of the findings and how they relate to theory, research, practice and policy.

Findings

Translanguaging as an Academic Language

Languaging is a social practice that can be expressed in various forms of communication. What makes languaging unique is that every individual speaker creates their own form of languaging drawing from their available linguistic resources in order to make meaning and demonstrate expression (García & Wei, 2013). Because of the constant evolution of languaging practices (Bakhtin, 2010), researchers recognized that translanguaging was becoming its own language of communication and consequently, the L1 and L2 binary was no longer a polarized distinction (Collins & Cioè-Peña, 2016; García & Sylvan, 2011; García & Wei, 2013). Despite the evolution of recognizing translanguaging as its own language practice, code-switching and translanguaging were often stigmatized because those practices did not represent the standard form of any one language (Edwards, 2006). Within US schools, the academic language of the classroom was still considered to be Standard English, and the use of translanguaging or code-switching was considered to be a “sloppy” (p. 151) informal use of languaging practices (Acosta-Belén, 1975).

One of the findings of this study was that the focal students of WNT used their translanguaging practices to communicate informally among each other, but as their language and literacy practices evolved, they also used their translanguaging practices within the context of formal academic learning. Cummins (1999) noted the distinction between conversational fluency and academic language, while Gee (2012) identified primary Discourse as the informal discourse of the home contrasted by secondary Discourse as the discourse of the learning environment. Those distinctions were evident within the languaging practices of the WNT

students. Their informal languaging practices included Standard Spanish and/or translanguaging which generally demonstrated the solidarity they shared with their peers. I noted that during the R&J unit, the students often discussed the content of their learning informally within their student teams using a more relaxed register of Spanish and translanguaging. Only occasionally did I note that they used academic vocabulary to complete their PBL tasks. Toward the end of the semester, however, as the students were trying to meet the deadline of their filming project, their academic exchanges regarding either the filming, the editing or the binder documentation included translanguaging. They continued to translanguage to effectively communicate meaning and intent with their team members, but now they were integrating academic concepts and vocabulary from the content unit within their translanguaging practices. The findings of this study showed that students used Standard Spanish and translanguaging to communicate informally among each other, but they also demonstrated a form of heteroglossic diversity (Bakhtin, 2010) by using both formal and informal registers in Spanish and English to include translanguaging to express their understanding and comprehension of the formal academic content knowledge as well.

In chapter four, when Ramón realized that Hadie was in opposition to his views on extracting the oil in the MVP, he realized that he had to present Hadie with a sound argument to win her over. The task of developing a solid persuasive argument was a higher order task that required logical thought processes along with critical thinking skills. Ramón quickly developed such an argument in an effort to persuade Hadie to support his position. When Ramón learned that Hadie's grandpa was a mechanic, he immediately launched an on the spot persuasive argument justifying why that the MVP would need mechanics like Hadie's grandpa. "So those trucks que he hagan bad, pues los van a traer y va aver MUUUcho work para los mechanics and

y para los truck drivers! (*So those trucks that break or go bad, they will bring them here and there will be a lot of work for the mechanics and for the truck drivers!*) (Field notes, 3/6/17).

Through his effective use of translanguaging, he presented a persuasive academic argument to Hadie based on the literature he read regarding drilling and fracking justifying why the city would benefit from extracting the oil. More importantly, he expressed very clearly that Hadie's grandpa, as a mechanic, would also benefit economically from the work created as a result of extracting the oil. Ramón's translanguaging practice very clearly expressed not only his position, but he included arguments that also benefited Hadie and her grandpa.

Pertinent to the finding on how the students used their academic translanguaging to express content understanding, was the role that the learning environment played in their languaging practices. The learning environment of the WNT classroom was conducive to creating an interactive space where the students could openly and freely engage in translanguaging practices either formally or informally. Because the students were assigned to work in teams, they were able to easily express ideas or ask questions to one another without fear of reprimand from the teacher for not using Standard English within the formal classroom setting. The WNT learning environment offered a safe, non-threatening atmosphere where the voice of conversational language often merged with the voice of academic language through translanguaging. As the co-director for *The Odyssey* film project, Hadie took her job very seriously to ensure that the filming schedule was followed, that the actors were prepared for their readings, and that the scripts accurately reflected the content of the story. When Hadie noticed that the script writers had changed the storyline, she became very alarmed and immediately questioned her team. "Have you read the script? They changed it! Es que aquí en la story lo ponen enfrente del niño." (*It's that here in the story they put him in front of the child*) (Field

notes, 4/20/17). Despite her emotion in discovering last minute changes to the script, Hadie effectively used her translanguaging to immediately identify how the script had changed from the original storyline. She clearly and easily expressed her argument to the script writers who admitted that they were still working on the script. Her translanguaging was based on the academic content of *The Odyssey*, and she communicated to her team without difficulty that such changes would have an adverse impact on their filming schedule.

The students of WNT were provided with safe space to express themselves and negotiate meaning by using their available languaging resources without fear of formal reprimand. This form of dynamic bilingualism or dynamic translanguaging in this case was very beneficial to the students of the WNT program as it allowed them to discuss concepts formally and/or informally as well as negotiate meaning making with their team (García & Kleifgen, 2010).

Making Higher Order Connections through Project Based Learning

Dewey recognized that isolated learning within the four walls of a classroom was not enough to produce a competent individual who could readily contribute to society's workforce (Kilpatrick, 1918). Because Dewey believed that learning had to be practical and functional so that society could benefit from educating its children, he designed the Project Method. This method implemented Dewey's Pattern of Inquiry (Kilpatrick, 1918) where learning was based on students applying their learning to solve a real world problem. Dewey stated that "Without a problem, there is a blind groping in the dark" (Dewey, 1938, p. 3), so the idea of formatting the learning into a project that led the students to identify the problem in order to find possible solutions mirrored a real world plan of action. Modern PBL designs structured by Krajcik and Blumenfeld (2006) and the Buck Institute for Education (2016) have been constructed around solving a real-world tasks driven by an essential question. As Dewey envisioned, the goal of

project based learning was to engage the learner in a relevant learning experience to produce a knowledgeable citizen of the community.

During my study, I noticed that the students read abridged versions of *Romeo and Juliet* and *The Odyssey*. I initially questioned this as a former English teacher and, like Dewey, I felt that the instruction had to be relevant to create a learner who could readily apply concepts from the literature to the real world. But I wondered if the students would be able to fully engage in critical thinking and higher order discussion by reading abridged versions of the text rather than the actual text itself. The findings of this study showed that with the implementation of a PBL instructional format, the students were able to engage in higher order thinking to solve their project tasks with abridged versions of the text as their foundational information source. I reflected on my own biases as a teacher, and realized that what mattered most was not the information source but how the students engaged with each other to discuss the information presented. Although I felt that there was a certain level of appreciation in the language of Shakespeare, the fact that the students read abridged texts did not prevent them from critical reading and higher order learning. By having the students analyze and apply the different forms of love described in *Colours of Love* (Lee, 1973) to the characterizations of R&J, the students demonstrated critical reading and critical thinking as they evaluated the concepts from one source and applied them to another. Not only did the students apply those love types to the different characters from the play, they also had to interpret and identify how those love types were evident in their teachers' love biographies as well. Because learning was socially mediated before it could be internalized psychologically (Vygotsky, 1978), the open discussions that the students held after they were presented with new information were critical components to internalizing meaning making and content understanding. Open disagreements among the

student teams also led to clarification of misinterpretations as the students negotiated content understanding. I discovered that it didn't matter that the foundational source of information were abridged versions of the text, what mattered was *how* they engaged with the text thereafter and how they made real world connections between their learning and their own life.

One day during the filming of *The Odyssey*, the students were reviewing the day's script that included the scene where Odysseus and three of his men were running to find something to eat after a long journey at sea. As the students read through the script, they did so without the emotion or inflection that was evident in the storyline. When they acted out the scene, they were slowly jogging and the three seamen actually out-ran Odysseus to reach the food source. GEO stopped the scene and reminded the actors that Odysseus was strong and powerful, so it be would be uncharacteristic to have his men out-run him. GEO also reminded the actors that they had been traveling for 10 years, so because they were desperate to find food, they would not be jogging at a leisurely pace. I questioned whether the students actually understood this scene when they read it initially. It wasn't until they had to act out the scene and apply their understanding of the story that the students then understood why Odysseus as the leader would be at the front of the pack and why they were so tired and hungry as they were looked for food. The second take of the scene was then very different as it accurately reflected the emotion of the characters and the intent of the original storyline.

Aligned to the finding regarding the connection between PBL and higher order thinking, was the fact that the learning environment functioned as a mediating artifact that led to higher order learning. In order to capture a sense of authenticity, the "classroom" was now wherever the students needed to film their storyline. When Calypso spoke with Odysseus in the garden, the learning environment moved to the patio, and when they needed to film a battle scene, the

field became the classroom ideal for filming. The students recognized the importance of filming around campus because the students in the general population were usually relegated to the instruction within their classroom. The students of WNT were given the liberty to prioritize their learning to create their film outside of the physical classroom setting.

When ELA asked if I observed the students making inferencing connections to the literature, I explained to him that because the classroom setting was based on the needs of the filming schedule, the students made sure they not only understood the plot, but that they also understood the motives of the various characters in order to portray them accurately and keep true to the story. I witnessed the students making inferencing connections to the reading simply because they were doing more than just reading. Because the learning environment shifted to the needs of the day's filming, the students understood that it was important not only to read for understanding, but to be able to effectively portray the scene for their film as they had been tasked to do. Throughout the filming process, the learning environment shifted to settings around campus, and each of those areas functioned as a mediating artifacts that contributed to the learning because the settings were so closely tied to the themes of the storyline. When the students initially read the scene in their classroom where Odysseus and his men were looking for food, I don't believe they internalized how desperate Odysseus and his men were until they had to physically act out the scene. The cafeteria, as the learning environment for that day, functioned as a mediating artifact that emphasized to the students the motives of the characters and contributed to helping them internalize the significance of the scene allowing them make those higher order connections.

This section presented the finding that showed how the WNT projects led to higher order learning and critical thinking as the students engaged in their PBL projects. Although the

students read abridged versions of the text, they nonetheless applied their understanding to the reading to deepen their understanding and academic knowledge.

Parallel Transformations between Student Identities and Language and Literacy Practices

Language is a social practice as it is connected to who we are what we are doing (Gee, 2012). Pertinent to languaging practices is the theory of Figured Worlds that states that realms or worlds are socially and culturally constructed, representing actions, discourses, artifacts and identities (Holland et al., 1998). Luttrell and Parker (2001) state that it is important to not confound a students' position with their disposition. This statement applies to the transformation evident in the languaging practices and identities of the students in the figured world of WNT.

The students of WNT entered the program knowing that their ascribed identities cast them as cheaters based on the scandal to inflate the district's state accountability and as *cholos* or gang members based on the fact that the school was located in an impoverished area of town. The students collectively accepted the positions of cheaters and *cholos* as those stereotypes had been embedded within their school and community for years prior to their enrollment. But as their identity within the WNT figured world was strengthening, their position shifted to a disposition where they started to recognize themselves not as cheaters and *cholos*, but as high achieving students who were changing the negative narrative cast upon their school and community. Various literacy events, including successful project presentations and gains in test scores, functioned as pivots that triggered a communal show of solidarity where the students recognized their potential as students and accepted their newfound elevated status as high functioning students. Like Maria in the Bartlett study (2008), the shift in the WNT students transformed not only their day to day practices but reflected a change in their language and literacy practices.

The implementation of the inaugural WNT program was in and of itself the initial pivot that propelled the students to recognize in a show of solidarity that they needed to change the narrative aligned to their ascribed identities. In chapter five, Alice and Hadie reflected on how they wanted to change the stereotype surrounding the high schools in their district. The students believed that because their transformed status was now somewhat elevated as a result of their academic performance, the negative assumptions surrounding the students enrolled in their district were no longer valid. I started to observe subtle changes in their language and literacy practices that reflected shifts in their identities. During the focus group interview, I asked the students to reflect on their test score gains. Hadie quickly responded that their “awesome” scores were a reflection of their dedicated teachers, while Ramón stated that he was proud and Alice stated that their high scores were historic. But Melanie summarized her reflection in a show of solidarity by embracing their newfound status by stating, “We’re a school of loving people. We connect with friends. I don’t think everybody sees that” (Focus group interview, 5/31/17). The test scores functioned as a pivotal literacy event that propelled the students to recognize and demonstrate their strengths as students that had been oppressed by negative public perception. Their status as bad students was no more as they embrace and embodied the status of good students (Bartlett, 2008).

As the students embraced their newfound elevated status as good students, the WNT students used their language and literacy practices to express that their ascribed identities no longer represented their potential as students. The next section will present the implications of the findings for this study.

Implications of Findings

In this chapter, I presented three significant findings that emerged from the study: 1) Translanguaging was used by the WNT students not only in informal communication, but it was also used academically to demonstrate understanding and content knowledge; 2). By using a PBL approach to learning that included solving real world tasks, the students of WNT demonstrated evidence of higher order thinking as they worked collaboratively to solve their project tasks; 3). As the identities of the students evolved within the figured world of WNT, so too did their language and literacy practices. In this section I will discuss the implications of the findings relative to research and theory followed by implications for practice and policy.

Research and Theory

The distinction between conversational fluency and academic language that Cummins (1999) referred to as BICS/CALP stated that the languaging practices of second language learners differed when communicating informally versus integrating academic language into their languaging repertoire. I often observed the students of WNT using their informal conversational languaging to communicate with one another, but when they were practicing or preparing for the state exam, they were directed by their teachers to use only the academic language of the state assessment, English, to show proficiency on the TELPAS writing samples and STAAR exam. MacSwan and Rolstad (2003) challenged the distinction between the languaging practices of BICS/CALP. They argued that by differentiating languaging practices, the distinction immediately placed academic languaging in a superior position as being “more correct” (p. 331) than the conversational practices of the learners (MacSwan & Rolstad, 2003). Cummins (1979, 2000a, 2000b) stated that he never intended to imply that academic languaging

was superior to conversational fluency. MacSwan and Rolstad (2003), however, stated that the theoretical framework of the BICS/CALP research indicated that they felt conversational fluency had to precede academic proficiency. Thus, as I applied the linguistic exchanges identified by Zentella (1999) to the languaging practices of the students of WNT, I observed that the informal conversational languaging of the students didn't necessarily precede academic proficiency, but instead it often merged with their more formal academic languaging practices. Zentella (1997) noted that the code-switches of the children in her study demonstrated intentional shifts for specific emphasis or clarification. Along the same lines, translanguaging, according to Garcia (2013), was a complex, interrelated discursive practice, similar to the languaging practices of *out of mouth, in the head* or *on the spot* identified in Zentella's study (1999). I observed the students of WNT use Zentella's linguistic exchanges to informally communicate with their peers and to express content knowledge and academic meaning making purposefully and intentionally to their peers and/or their teachers. Just as the binary between the L1 and L2 distinction was blurring, the opposing constructs of conversational fluency and academic languaging may no longer be polarized. Instead, these constructs might be positioned on Hornberger's (1989) biliteracy continua where students would be able to draw from various languaging shifts to express meaning and communicate with others. Because of the limited research on the similarities and differences between code-switching and translanguaging, understanding how these languaging practices could be implemented within a learning environment could contribute greatly to their effectiveness in a linguistically diverse classroom.

The findings of this study also have implications on how the physical learning environment served as a mediating artifact contributing to the students' use of language and literacy practices. Because the students' PBL units were based on student-led teams working

collaboratively to solve their research problems, the learning environment was designed to promote a non-threatening, language friendly learning environment where the students were able to draw from their languaging resources to communicate with their team members. Sociocultural theory informs us that when learners appropriate culturally mediated artifacts as they engage in a learning activity, they will be better able to successfully internalize and apply what they have learned (Vygotsky, 1978). In the case of WNT, the physical learning environment of the classroom functioned as a cultural artifact allowing the students to collaborate with one another to use their translanguaging practices to express content knowledge. Within the classroom environment that was designed to promote student collaboration, the students were able to understand how their informal language and literacy practices were connected to formal academic practices with their PBL (Perry, 2012). This interactional classroom environment functioned as a third space (Gutiérrez, 2008; Gutierrez, 2009), where the informal and formal languaging practices of the students came together as one to facilitate academic learning. Educators could benefit from further research on how classroom languaging practices and student identities within figured worlds affect each other. The languaging practices of the WNT students mirrored the shifts in their developing identities. The students were provided with a space to openly discuss new concepts where they could use their translanguaging to freely communicate with their peers, as they learned to express knowledge gained without having to distinguish between informal conversational languaging and formal academic languaging.

In order to understand how the students of WNT used their language and literacy practices to make meaning to complete their PBL projects, it was important to comprehend how the students of WNT used their language and literacy. Zentella stated that “children who integrate linguistic features of several worlds sometimes defy traditional language conventions”

(Zentella, 1997, p. 3). Recognizing that students of WNT used their translanguaging practices in several capacities to include formal academic situations, allowed them to gain relevant content learning as they collaborated to solve their PBL task. The learning environment contributed significantly to their languaging practices as it provided the students with a safe environment where they could focus on the content knowledge and freely draw from their available linguistic resources to make meaning and express intent. More research on the impact of the learning environment to languaging practices of ELLs could contribute to how teachers arrange their classrooms, and on a bigger scale, how districts create engaging learning environments that promote authentic languaging practices.

Practice and Policy

The implications of the findings of this study related to practice and policy are plausible based on what Garcia (2013) identified as the purpose of translanguaging: 1) Participation; 2) Elaboration; 3) Raising questions.

For practitioners and policy makers, understanding how the learning environment impacts student participation is key to promoting effective languaging practices. The goal of a culturally inclusive learning environment, where all learners are included in the learning process, is to create classrooms where students are actively participating in all aspects of the learning to include using their translanguaging practices to make meaning. The subtractive practices of early bilingual programs once isolated ELLs, preventing them from fully engaging and participating in the learning process, thereby stifling their languaging practices. Relative to the implication that the learning environment should promote student participation is the fact that how we design school master schedules can also promote or hinder student participation. The classes of WNT were designed to offer the students an interdisciplinary approach to learning. In

addition to the combination World Geography/English I class, the students were also enrolled in a combination Biology/Art class. This multidisciplinary approach to learning promoted active student participation as the students identified cross curricular connections to their PBL projects. For the R&J unit, the lesson integrated the academic language of Shakespeare along with student authoring as they wrote their love biographies. In the MVP unit, the students used geography based concepts to include as part of their persuasive presentation to city council. The unit on *The Odyssey* allowed the students to author various forms of writing to include creative writing in the creation of the script, practical and functional technical writing that was demonstrated when the students created filming schedules and applying their organization skills to document all the aspects of creating their film based on a classical piece of literature.

In order to maximize student learning, ELLs should not only engage and participate in the classroom setting, but they should be provided with opportunities for meaningful elaboration and collaboration with their peers to express what they have learned. Teachers and policy makers alike must promote and recognize the students' ability to expound on their learning. English only or English based instructional program may stifle relevant learning and possibly inhibit the ELL from fully expressing what they have learned. Hornberger and Link (2012) recognized the importance of allowing students to demonstrate content understanding as they emphasized that when students were able to draw from their languaging repertoire to make meaning, their language development was strengthened. By promoting languaging practices such as translanguaging, teachers can focus on the learning potential of the student as they are able to articulate their understanding of the content information.

An inviting and engaging classroom where students can openly raise questions based on what they have learned can function as cultural artifact that can promote higher order learning.

The physical structure of a classroom can encourage small and large group discussions where the focus is on content learning and not relegated to specific languaging practices. A positive indicator of student learning is when students are socially engaged in the classroom discussion to the point where they are able to question how concepts are connected to real world examples. The students' ability to formulate questions based on content knowledge aligns with Vygotsky's theory that information is presented socially before it is internalized psychologically (Vygotsky, 1978). But in order for ELLs to be able to internalize new learning, it is imperative that educators erase or identify lingering biases, such as deficit approaches to learning, in order to fundamentally support their languaging practices (Brooks, 2018). Educator biases that impact student learning are sometimes subliminal in nature but are nonetheless detrimental to students, especially to ELLs.

In a study conducted by Zwiers (2007), the researchers discovered that teachers asked ELLs basic recall questions while the English speaking students were often asked to elaborate or justify their answers. The questions directed to the ELLs were low order questions that connected simply and directly to the material learned, but the mainstream students were challenged to explain the connections and justifications in their answers. Teachers may not have wanted to embarrass ELLs if they answered incorrectly, but the practice of protecting the ELLs from embarrassment also prevented them from the potential to gain the same academic status as their mainstream peers (Hong-Nam & Leavell, 2006). By asking the ELLs only low level questions assured that their academic status remained a level below the high performing English speaking students. If teachers harbor a deficit perspective regarding the learning potential of ELLs, then regardless of the learning environment that is designed to encourage participation and

elaboration, the ELLs will not be able to demonstrate evidence of higher order learning and their learning potential will be stifled.

Conclusion

The focus of this study was to understand how the oral and written interactions of ELLs within a PBL learning environment shaped their academic language and literacy. More specifically, my goal was to examine how the languaging practices of the students of WNT contributed to the process of completing their PBLs. Additionally, this study examined the parallels between the language and literacy practices and the developing identities of the students within the figured world of WNT. By using Discourse Analysis to study the languaging exchanges of the students, I noted that the student discourses included the related and opposing constructs of solidarity and status (Gee, 2012). Early in the semester I noted that, in a show of solidarity, the students of WHS challenged the unfounded stereotypes cast onto their school and student body based on the district's cheating scandal years before they enrolled combined with the fact that their school was located in an economically disadvantaged part of town. As the students successfully completed various PBL tasks, their identity with the figured world of WNT strengthened and as such was reflected in their language and literacy practices. Although the WNT students continued to demonstrate solidarity within their peers, the solidarity that they exhibited now was based on gaining a new academic capital as a result of their elevated status as good students. My goal was to examine the languaging practices of the students of WNT so that I could tell their stories through this ethnographic study. I believe that I was able to describe their stories in a compelling manner that focuses on their potential as learners and not just ELLs. By analyzing their linguistic exchanges based on Zentella's research (1999), I wanted to provide

an insider view of the learning environment of an ELL to demonstrate their inherent potential to learn and gain academic proficiency through their own languaging practices.

References

- Acosta-Belén, E. (1975). *Spanglish: A case of languages in contact*: Minute Tape.
- Agar, M. H. (1996). The professional stranger: An informal introduction to ethnography.
- Alamillo, L., Palmer, D., Viramontes, C., & Garcia, E. (2005). California's English-only policies: An analysis of initial effects. *Leaving children behind: How 'Texas-style' accountability fails Latino youth*, 201-224.
- Alexander, P. A., Kulikowich, J. M., & Jetton, T. L. (1994). The role of subject-matter knowledge and interest in the processing of linear and nonlinear texts. *Review of educational research*, 64(2), 201-252.
- Allwright, R. L. (1980). Turns, topics, and tasks: Patterns of participation in language learning and teaching. *Discourse analysis in second language research*, 165-187.
- Anderson, J. R. (1990). *Cognitive psychology and its implications*: WH Freeman/Times Books/Henry Holt & Co.
- Araujo, B. E., & De La Piedra, M. T. (2013). Violence in the US Mexico Border and Student's Capital to Respond.
- Babbie, E. (2014). *The basics of social research* (Sixth ed.). Belmont, CA: Wadsworth.
- Baker, C. (1996). Bilingualism: definitions and distinctions. *Foundations of bilingual education and bilingualism*, 4-22.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism* (Vol. 79): Multilingual matters.
- Bakhtin, M. M. (2010). *The dialogic imagination: Four essays* (Vol. 1): University of texas Press.

- Bartlett, L. (2008). Bilingual literacies, social identification, and educational trajectories. *Linguistics and education*, 18(3), 215-231.
- Bejarano, C. (2010). Border rootedness as transformative resistance: youth overcoming violence and inspection in a US–Mexico border region. *Children's Geographies*, 8(4), 391-399.
- Bereiter, C., & Scardamalia, M. (1993). Surpassing Ourselves: an inquiry into the nature and implications of expertise (Chicago & La Salle, Illinois, Open Court Publishing Company).
- Blumenfeld, Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *EDUCATIONAL PSYCHOLOGIST*, 26(3-4), 369-398.
- Blumenfeld, P., Kempler, T. M., & Krajcik, J. (2006). Motivation and cognitive engagement in learning environments. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences*: Cambridge University Press.
- Boss, S., Larmer, J., & Mergendoller, J. R. (2013). Competencies for college, careers, and life. In *PBL for 21st century success: Teaching critical thinking, collaboration, communication, and creativity* (pp. 7-38): Buck Institute for Education.
- Bourdieu, P. (1989). Social space and symbolic power. *Sociological Theory*, 7(1), 14-25.
- Bourdieu, P. (1997). Cultural capital and pedagogic communication in *Reproduction in education, society, and culture* (pp. 71-106). Thousand Oaks: Sage Publications.
- Brooks, M. D. (2018). Pushing Past Myths: Designing Instruction for Long-Term English Learners. *TESOL quarterly*, 52(1), 221-233.
- The Buck Institute for Education.(2016). Retrieved from www.bie.org

- Call, M. E., & Sotillo, S. M. (1995). Is talk cheap? The role of conversation in the acquisition of language. *Hispania*, 114-121.
- Campbell, S. A. (2012). The Phenomenological Study of ESL Students in a Project-based Learning Environment. *International Journal of Interdisciplinary Social Sciences*, 6(11), 139-152.
- Chandler, T., Park, Y. S., Levin, K. L., & Morse, S. S. (2013). The incorporation of hands-on tasks in an online course: an analysis of a blended learning environment. *Interactive Learning Environments*, 21(5), 456-468. doi:10.1080/10494820.2011.593524
- Chapter 39.027. *Texas Education Code*. (2013). Retrieved from <https://tea.texas.gov/>
- Chung, J. (2004). Promoting student learning through a student-centered problem-based learning subject curriculum. *Innovations in Education and Testing International*, 41(2), 157-168.
- Collins, B. A., & Cioè-Peña, M. (2016). Declaring freedom. *Translanguaging with Multilingual Students: Learning from Classroom Moments*, 118.
- Commissioner's Rules Concerning Educator Standards. (2007-2018). Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter149/ch149aa.html>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*: Sage.
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of educational research*, 49(2), 222-251.
- Cummins, J. (1999). BICS and CALP: Clarifying the Distinction.
- Cummins, J. (2003). BICS and CALP: Origins and rationale for the distinction. *Sociolinguistics: The essential readings*, 322-328.

- Cummins, J., Baker, C., & Hornberger, N. H. (2001). *An introductory reader to the writings of Jim Cummins* (Vol. 29): Multilingual Matters.
- de la Piedra, M. T., & Guerra, J. C. (2012). The literacy practices of transfronterizos in a multilingual world. *International Journal of Bilingual Education and Bilingualism*, 15(6), 627-634.
- Dewey, J. (1938). The pattern of inquiry. *The Essential Dewey*, 2, 169-179.
- Edelson, D. C., & Reiser, B. J. (2006). Making authentic practices accessible to learners. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences*: Cambridge University Press.
- Educator Guide Texas English Language Proficiency System (TELPAS). (2017). Texas Education Agency Retrieved from <https://tea.texas.gov/student.assessment/ell/telpas/>.
- Edwards, J. (2006). Foundations of Bilingualism *The handbook of bilingualism*. New York: Wiley-Blackwell.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing Ethnographic Fieldnotes*. Chicago: The University of Chicago Press.
- English Language Arts and Reading, English I. (2009-2010). Retrieved from <http://ritter.tea.state.tx.us/rules/tac/chapter110/index.html>
- English, M. C. (2013). Supporting student self-regulated learning in problem and project based learning. *Interdisciplinary Journal of Problem Based Learning*, 7(2), 127-150.
doi:doi:10.7771/1541-5015.1339
- Erickson, F. (1985). Qualitative Methods in Research on Teaching. Occasional Paper No. 81.

- Escamilla, K. (2006). Semilingualism Applied to the Literacy Behaviors of Spanish-Speaking Emerging Bilinguals: Bi-illiteracy or Emerging Biliteracy? *Teachers College Record*, 108(11), 2329-2353. doi:10.1111/j.1467-9620.2006.00784.x
- Esquinca, A. (2012). Tranfronterizos' socialization into mathematical discourse: capitalizing on language and cultural resources or caught between conflicting ideologies? *International Journal of Bilingual Education and Bilingualism*, 15(6), 669-686.
- Esteban-Guitart, M., & Vila, I. (2015). The voices of newcomers. A qualitative analysis of the construction of transnational identity. *Psychosocial Intervention*, 24(1), 17-25.
- Frank, C. (1999). *Ethnographic Eyes*. Portsmouth, NH: Heinemann.
- Garcia, O. (2009). Bilingualism and translanguaging in *Bilingual education in the 21st century: A global perspective*. (pp. 42-72). Malden, MA: Wiley-Blackwell.
- García, O. (2011). *Bilingual education in the 21st century: A global perspective*: John Wiley & Sons.
- García, O., & Kleifgen, J. A. (2010). *Educating emergent bilinguals: Policies, programs, and practices for English language learners*: Teachers College Press.
- García, O., & Sylvan, C. E. (2011). Pedagogies and practices in multilingual classrooms: Singularities in pluralities. *The Modern Language Journal*, 95(3), 385-400.
- García, O., & Wei, L. (2013). *Translanguaging: Language, bilingualism and education*: Springer.
- Gee, J. P. (2012). *Social linguistics and literacies* (Fourth Edition ed.). New York: Routledge.
- Gee, J. P. (2014). *An introduction to discourse analysis: Theory and method*: Routledge.
- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In C. Geertz (Ed.), *The interpretation of cultures: Selected essays* (pp. 3-30). New York: Basic Books.

- Gibbons, P. (2003). Mediating language learning: Teacher interactions with ESL students in a content-based classroom. *TESOL quarterly*, 37(2), 247-273.
- Goffman, E. (1979). Footing. *Semiotica*, 25(1-2), 1-30.
- Gonzalez, Moll, L. C., & Amanti, C. (2005). *Exploring Cultural Concepts: Funds of Knowledge*. Mahwah, NJ: Erlbaum.
- González, N. (2006). *I am my language: Discourses of women and children in the borderlands*: University of Arizona Press.
- Grabe, W., & Stoller, F. L. (1997). Content-based instruction: Research foundations. *The content-based classroom: Perspectives on integrating language and content*, 5-21.
- Grosjean, F., Bhatia, T., & Ritchie, W. (2004). Studying bilinguals: Methodological and conceptual issues. *The handbook of bilingualism*, 32-63.
- Gutiérrez, K. D. (2008). Developing a sociocritical literacy in the third space. *Reading Research Quarterly*, 43(2), 148-164.
- Gutierrez, K. D., Morales, P, Martinez, D. (2009). Re-mediating literacy: Culture, difference, and learning for students from nondominant communities. *Review of Research in Education*, 33, 212-245. doi:10.3102/0091732X08328267
- Hallerman, S., Larmer, J., & Mergendoller, J. R. (2011). PBL in the elementary grades: Novato, CA: Buck Institute for Education.
- Hammar Chiriac, E. (2008). A scheme for understanding group processes in problem-based learning. *Higher Education*, 55(5), 505-518. doi:10.1007/s10734-007-9071-7
- Hatt, B. (2007). Street Smarts vs. Book Smarts: The Figured World of Smartness in the Lives of Marginalized, Urban Youth. *Urban Review*, 39(2), 145-166. doi:10.1007/s11256-007-0047-9

- Haugen, E. (1954). Languages in Contact: Findings and Problems: JSTOR.
- Heath, S. B., & Street, B. V. (2008). *On Ethnography: Approaches to Language and Literacy Research. Language & Literacy (NCRL):* ERIC.
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education—theory, practice and rubber sling shots. *Higher Education*, 51(2), 287-314.
- Henderson, R. W., & Landesman, E. M. (1992). Mathematics and Middle School Students of Mexican Descent: The Effects of Thematically Integrated Instruction. Research Report No. 5.
- Hill, A. E. (2014). Using interdisciplinary, project-based, multimodal activities to facilitate literacy across the content areas. *Journal of Adolescent and Adult Literacy*, 57(6), 450-460. doi:10.1002/jaal.270
- Holland, D., Lachicotte, W., Skinner, D., & Cain, C. (1998). *Identity and agency in cultural worlds*. Cambridge, MA: Harvard University Press.
- Holm, M. (2011). PROJECT-BASED INSTRUCTION: A Review of the Literature on Effectiveness in Prekindergarten. *River Academic Journal*, 7(2), 1-13.
- Hong-Nam, K., & Leavell, A. G. (2006). Language learning strategy use of ESL students in an intensive English learning context. *System*, 34(3), 399-415.
- Hornberger, N. (1989). Continua of biliteracy. *Review of educational research*, 59(3), 271-296.
- Hornberger, N. (2005). Opening and filling up implementational and ideological spaces in heritage language education. *The Modern Language Journal*, 89(4), 605-609.
- Hornberger, N., & Link, H. (2012). Translanguaging in Today's Classrooms: A Biliteracy Lens. *Theory Into Practice*, 51(4), 239-247.

- Hugg, R., & Wurdinger, S. (2007). A practical and progressive pedagogy for project based service learning. *International Journal of Teaching and Learning in Higher Education*, 19(2), 191-204.
- Hung, & Der-Thanq, C. (2001). Situated Cognition, Vygotskian Thought and Learning from the Communities of Practice Perspective: Implications for the Design of Web-Based E-Learning. *Educational Media International*, 38(1), 3-12.
doi:10.1080/09523980110037525
- Kaplan-Weinger, J., & Ullman, C. (2015). *Methods for the ethnography of communication. Language in use in schools and communities*. New York: Routledge.
- Kilpatrick, W. H. (1918). *The project method: The use of the purposeful act in the educative process*: Teachers college, Columbia university.
- Knoll, M. (1997). The project method: Its vocational education origin and international development.
- Krajcik, & Blumenfeld, P. (2006). Project-Based Learning. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences*: Cambridge University Press.
- Kumar, M., & Kogut, G. . (2006). Students' perceptions of problem-based learning. *Teacher Development*, 10(1), 105-116. doi:doi:10.1080/13664530600587295
- Lakoff, G., & Johnson, M. (2008). *Metaphors we live by*: University of Chicago press.
- Lantolf, J. P. (2000). *Sociocultural theory and second language learning*: Oxford University Press.
- Larmer, & Mergendoller, J. (2015). Why We Changed Our Model of the “8 Essential Elements of PBL”. *The Buck Institute for Education*.

- Larmer, Mergendoller, J., & Boss, S. (2015). *Setting the standard for project based learning*: ASCD.
- Lee, J. A. (1973). *Colours of love: An exploration of the ways of loving*: New Press.
- Leow, R. P. (2001). Do learners notice enhanced forms while interacting with the L2?: An online and offline study of the role of written input enhancement in L2 reading. *Hispania*, 496-509.
- Levitt, P. (2004). Transnational Migrants: When "Home" Means More Than One Country. Retrieved from <http://www.migrationpolicy.org/article/transnational-migrants-when-home-means-more-one-country>
- Lewis, G., Jones, B., & Baker, C. (2012). Translanguaging: Developing its conceptualisation and contextualisation. *Educational Research and Evaluation*, 18(7), 655-670.
- Lichtman, M. (2013). *Qualitative Research in Education* (Third ed.). Los Angeles: Sage Publications, Inc.
- Liebttag, E., & Vander Ark, T. (2017). *Transforming border learning experiences: The New Tech Network in Borderland*. Retrieved from <http://www.gettingsmart.com/2017/05/transforming-border-learning-experiences-new-tech-network>
- Lund, S. (2016). *Making Learning Authentic: An Educational Case Study Describing Student Engagement and Motivation in a Project-Based Learning Environment*. ARIZONA STATE UNIVERSITY. Retrieved from Proquest (1793408301).
- Luttrell, & Parker, C. (2001). High school students' literacy practices and identities, and the figured world of school. *Journal of research in reading*, 24(3), 235-247.

- MacSwan, J., & Rolstad, K. (2003). Linguistic diversity, schooling, and social class: Rethinking our conception of language proficiency in language minority education. *Sociolinguistics: The essential readings*, 329-340.
- Martínez, R. A. (2010). " Spanglish" as Literacy Tool: Toward an Understanding of the Potential Role of Spanish-English Code-Switching in the Development of Academic Literacy. *Research in the Teaching of English*, 124-149.
- McClure, E. F. (1977). Aspects of code-switching in the discourse of bilingual Mexican-American children. *Center for the Study of Reading Technical Report; no. 044*.
- McCurdy, D. W., Spradley, J. P., & Shandy, D. J. (2004). *The cultural experience: Ethnography in complex society*: Waveland Press.
- McGhee, M. W., & Nelson, S. W. (2005). Sacrificing Leaders, Villainizing Leadership: How Educational Accountability Policies Impair School Leadership. *Phi Delta Kappan*, 86(5), 367-372.
- Mendoza-Denton, N. (2008). *Homegirls*. Malden, MA: Blackwell Publishing.
- Merriam, S. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Milroy, L. (1980). *Language and social networks*. New York: Basil Blackwell.
- Milroy, & Milroy, L. (1985). Authority in language. Investigating language prescription and standardization.
- Moore, D. W., & Onofrey, K. A. (2007). Fostering literate academic identities during the first days of school. *Adolescent literacy instruction: Policies and promising practices*, 286-303.

- Murillo, L. A. (2010). *Local literacies as counter-hegemonic practices: Deconstructing anti-Spanish ideologies in the Rio Grande Valley*. Paper presented at the 59th yearbook of the National Reading Conference.
- A Nation at Risk: The Imperative for Educational Reform*. (1983). Retrieved from The National Commission on Excellence in Education
- The New Tech Network*. (2017). Retrieved from <https://newtechnetwork.org/resources/together-can-create-nation-proud-public-schools/>
- Olsen, L. (2014). *Reparable Harm: Fulfilling the unkept promise of educational opportunity for Long Term English Learners*. Retrieved from www.californianstogether.org
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*: Sage.
- Payne, R. K. (2005). A framework for understanding poverty. Highlands, TX: aha! Process. *Inc.* Google Scholar.
- Perry, K. H. (2012). What Is Literacy?--A Critical Overview of Sociocultural Perspectives. *Journal of Language and Literacy Education*, 8(1), 50-71.
- Petersen, C., & Nassaji, H. (2016). Project-Based Learning through the Eyes of Teachers and Students in Adult ESL Classrooms. *Canadian Modern Language Review*, 72(1), 13-39. doi:doi:10.3138/cmlr.2096
- Relaño Pastor, A. M. (2007). On border identities.'Transfronterizo'students in San Diego. *Diskurs Kindheits-und Jugendforschung*, 2(3), 263-277.
- Ruiz, d. V., Jorge. (2005). Performance-based school reforms and the federal role in helping schools that serve language-minority students. In A. Valenzuela (Ed.), *Leaving children behind: how "Texas-style accountability fails Latino youth*. New York: State University of New York Press.

- Rus, D. (2015). Developing technical writing skills to engineering students. *Interdisciplinarity in Engineering, 19*, 1109-1114. doi:10.1016/j.protcy.2015.02.158
- Savery, J. (1996). Problem Based Learning: An instructional model and its constructivist framework. Retrieved from <http://books.google.com/books?id=mpsHa5f712wC&lpg=PA135&ots=sXiiygaXOn&dq=instructional%20shift&lr&pg=PA135#v=onepage&q=instructional%20shift&f=false>
- Scarcella, R. (2003). Academic English: A Conceptual Framework.
- Staudt, K., & Coronado, I. (2002). *Fronteras no más: Toward social justice at the US-Mexico border*: Macmillan.
- Stecher, B., Vernez, G., & Steinberg, P. (2010). *Reauthorizing No Child Left Behind Facts and Recommendations*. Retrieved from www.rand.org/pubs/monographs/MG977.html
- Stoller, F. (2002). Project work: A means to promote language and content. *Methodology in language teaching: An anthology of current practice*, 107-119.
- Tamin, S. R. (2013). Case study of teachers implementing project-based learning. *Interdisciplinary Journal of Problem Based Learning, 7*(2), 71-101. doi:10.7771/1541-5015.1323.
- 2016-2017 Texas Academic Performance Report. Retrieved from <https://tea.texas.gov/>
- Texas Education Agency. (2017). *TELPAS Resources*. Retrieved from <https://tea.texas.gov/student.assessment/ell/telpas/>
- Texas Education Agency Academic Excellence Indicator System. 2003-2012. Retrieved from <https://rptsvr1.tea.texas.gov/perfreport/aeis/index.html>
- Thomas, J. W. (2000). A review of research on project-based learning.

- Thorne, J. L. S., & Lantolf, J. (2006). Sociocultural theory and the genesis of second language development: Oxford: Oxford University Press.
- Valdés, G. (1976). *Social interaction and code switching patterns: A case study of Spanish/English alternation*: Bilingual Press/Editorial Bilingüe.
- Valdés, G. (2004). Between support and marginalisation: The development of academic language in linguistic minority children. *International Journal of Bilingual Education and Bilingualism*, 7(2-3), 102-132.
- Valenzuela, A. (2005). *Leaving children behind: how "Texas-style" accountability fails Latino youth*. Albany: State University New York Press.
- VanDerLinden, K. (2014). Blended Learning as Transformational Institutional Learning. *New Directions for Higher Education*, 2014(165), 75-85. doi:10.1002/he.20085
- VanPatten, B., & Williams, J. (2014). *Theories in second language acquisition: An introduction*: Routledge.
- Velez, F. (2010). *Meeting the needs of English learners in project-based learning schools*. UNIVERSITY OF CALIFORNIA, LOS ANGELES. Retrieved from Proquest (863572737).
- Viruell-Fuentes, E. A. (2006). "MY HEART IS ALWAYS THERE": THE TRANSNATIONAL PRACTICES OF FIRST-GENERATION MEXICAN IMMIGRANT AND SECOND-GENERATION MEXICAN AMERICAN WOMEN. *Identities*, 13(3), 335-362. doi:10.1080/10702890600838076
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

- Walqui, A. (2007). Scaffolding instruction for English language learners: A conceptual framework *Bilingual education: An introductory reader* (pp. 202-218). Clevedon, UK: Multilingual matters.
- Walsh, J. A., & Sattes, B. D. (2016). *Quality questioning: Research-based practice to engage every learner*: Corwin Press.
- Weinreich, U. (1979). *Languages in contact: Findings and problems*: Walter de Gruyter.
- Welsh, L. C., & Newman, K. L. (2010). Becoming a Content-ESL Teacher: A Dialogic Journey of a Science Teacher and Teacher Educator. *Theory Into Practice*, 49(2), 137-144.
doi:10.1080/00405841003641485
- Welton, A., & Williams, M. (2015). Accountability Strain, College Readiness Drain: Sociopolitical Tensions Involved in Maintaining a College-going Culture in a High "Minority", High Poverty, Texas High School. *High School Journal*, 98(2), 181-204.
- What is a makerspace? (2014-2018). Retrieved from <https://www.makerspaces.com/what-is-a-makerspace/>
- Wiley, T. G. (1996). *Literacy and Language Diversity in the United States. Language in Education: Theory and Practice* 87: ERIC.
- Wilson, B. (1996). Constructivist learning environment. *Case studies in instructional design*. (pp. 135-147). Englewood Cliff, NJ: Educational Technologies Publications, Inc.
- Yin, R. (1994). *Case study research: Design and methods*. Beverly Hills: CA: Sage publishing.
- Zentella, A. C. (1997). *Growing up bilingual: Puerto Rican children in New York*: Wiley-Blackwell.
- Zentella, A. C. (2009). [Transfronterizo talk: Conflicting constructions of bilingualism on the US-Mexico border].

Appendix A

Summary of Research Design and Data Collection Tools

Research Question	Data Sources	Guiding Questions for Analysis
Overarching question <ul style="list-style-type: none"> How do oral and written interactions in a New Tech classroom shape the academic language and literacy development of ELLs? 	Ethnographic case study <ul style="list-style-type: none"> Participant observations, descriptive field notes Conceptual memos Semi-structured ethnographic interviews Focus group interview In-depth interviews Audio/video recording of classroom activities 	<ul style="list-style-type: none"> How was meaning negotiated through oral and written interactions? How did the students work collaboratively to express meaning through oral and written means? How did the oral interactions contribute to the students' use of language and literacy? How did the written interactions contribute to the language and literacy? What evidence existed to demonstrate shared repertoire regarding oral interactions? Written interactions? How did the oral/written interactions of the team differ from individual oral/written interactions.
Sub-question <ul style="list-style-type: none"> What are the language and literacy practices of the students in a New Tech classroom and how do they change over the course of the PBL unit? 	Ethnographic case study: <ul style="list-style-type: none"> Participant observations/descriptive field notes Conceptual memos Collected artifacts/samples of student work to include reviewing the writing samples of the students and collected writing samples from the projects Semi-structured ethnographic interviews 	<ul style="list-style-type: none"> What language and literacy practices did the students use to complete the PBL projects? How did their language and literacy practices change from one project to another? What were the students' language and literacy practices before NT compared to their language and literacy practices after New Tech. What writing samples showed language and literacy practices that

	<ul style="list-style-type: none"> • Focus group interview • In-depth interviews • Audio/video recording of classroom activities • Discourse analysis for contextualization signals and thematic organization 	<p>contrasted student writing before/after a PBL unit.</p> <ul style="list-style-type: none"> • What could the students do after one year in NT regarding language and literacy that they said they couldn't do before? • What tools did the students use to help them implement language and literacy practices that they did not use before? • What data showed how their literacy practices changed over time? • What examples indicated that students were different students/learners as a result of the interacting with their PBL team? • How was participating with a PBL team connected to the use of language and literacy?
<p>Sub-question</p> <ul style="list-style-type: none"> • What oral and written interactions do the ELLs use to complete their PBL tasks? 	<p>Ethnographic case study:</p> <ul style="list-style-type: none"> • Participant observations/descriptive field notes • Conceptual memos • Collected artifacts/samples of student work • Semi-structured ethnographic interviews • Audio/video recording of classroom activities • Discourse analysis for contextualization signals 	<ul style="list-style-type: none"> • What oral interactions were used by the students to complete the PBL project. • What written interactions were used by the students to complete your project. • Which oral interactions were most effective in completing the PBL project. Why? • What written interactions were most effective in completing the PBL project. Why? • What type of writing was required of each PBL project? • What kind of oral presentation did the

		students complete for their PBL presentations?
Sub-question <ul style="list-style-type: none"> How do students' language and literacy practices show solidarity and status in the figured world of Wilson New Tech? 	Ethnographic case study: <ul style="list-style-type: none"> Participant observations and descriptive field notes Conceptual memos Collected artifacts/samples of student work Semi-structured ethnographic interviews In-depth interviews of students and teachers Focus group interview Audio/video recording of classroom activities Discourse analysis for contextualization signals and thematic organization 	<ul style="list-style-type: none"> What evidence was there of shared repertoire among the PBL team? What evidence was there of shared practices related to language and literacy? How were student language and literacy practices in NT different from the language and literacy practices in classes outside of NT? According to the NT students, what did other students say about NT? About the students of NT? According to the NT students and teachers, how are NT students different from other students when they are combined as a student body? How were the NT PBL projects different from projects outside of NT? How are the NT students like the students of the general population? How are they different from students outside of NT?

Appendix B

Interview Protocol

1. Tell me about your family.
2. How many brothers and sisters?
3. Tell me about your parents.
4. What are your goals?
5. What do you think are your parents' goals for you?
6. How long have you lived in this area?
7. Tell me about your neighborhood.
8. What Elem and MS did you go to?
9. Have you been in ESL classes?
10. How would you rate yourself as a reader?
11. How would you rate yourself as a writer?
12. Did you apply to WNT or did you discover that they had put you in this program?
13. What kind of student were you before you entered WNT?
14. How did you do on the STAAR EOC?
15. What kind of student are you now?
16. What is your class schedule?
17. What do you normally do after school?
18. What are your hobbies or fun things you like to do?
19. How do you feel about being a sophomore?
20. How do you feel being a sophomore with the incoming freshmen in WNT?

Appendix C

Interview 1 Protocol

1. Tell me about your project
2. First of all you were concerned about choosing a side for or against?
3. Before you started that project had you heard anything about it?
4. Think about the whole project. Tell me about a time during the project that you felt really anxious or worried.
5. If you could evaluate yourself on that final presentation, how would you evaluate yourself?
6. Describe a time throughout this project that you felt great!
7. How do you feel about working with your team? What it have been easier to work by yourself?
8. Were there any negatives?
9. Tell me about the readings you did for your project. Were they easy or difficult to understand?
10. Were there parts of the readings that were difficult to understand?
11. In addition to all the reading you did, you did a lot of writing. How did you feel about the writing?
12. So what do you do when you are reading or writing and then you don't understand it or there is a word that you don't understand. How do you get past it? What do you do to understand it?
13. During your presentation, you were waiting in this room, then they took you to the other room. Then you saw another group presenting. How did you feel?
14. When it was your turn to go up and do your presentation, how were you feeling?

15. So now if in one of your classes they ask you to go up and present something, how does that make you feel?

Appendix D

Interview 2 Protocol

1. Tell me about your family.
2. How many brothers and sisters?
3. Tell me about your parents.
4. What are your goals?
5. What do you think are your parents' goals for you?
6. How long have you lived in this area?
7. Tell me about your neighborhood.
8. What Elem and MS did you go to?
9. Have you been in ESL classes?
10. How would you rate yourself as a reader?
11. How would you rate yourself as a writer?
12. Did you apply to WNT or did you discover that they had put you in this program?
13. What kind of student were you before you entered WNT?
14. How did you do on the STAAR EOC?
15. What kind of student are you now?
16. What is your class schedule?
17. What do you normally do after school?
18. What are your hobbies or fun things you like to do?
19. How do you feel about being a sophomore?
20. How do you feel being a sophomore with the incoming freshmen in WNT?

Appendix E

Focus Group Interview Protocol

Focus Group Discussion at the completion of the PBL

1. Walk me through your PBL task. Explain the details of your PBL. What problem did you have to solve? Who was in charge of what?
2. At the onset of the unit, how did you feel about the PBL? About your reading/writing skills?
3. Describe what surprised you the most about your PBL?
4. Explain what you perceived to be the greatest advantage or asset of the PBL?
5. Explain what part of the project you felt was not a success? Why? How could it have been better?
6. List the benefits and disadvantages of PBL for ELLs.
7. Explain how you used the writing process in your PBL unit?
8. Explain the difference:
 - a. Talking to your friends at lunch versus talking with your classmates in class.
 - b. The learning in a traditional classroom versus the learning in Wilson New Tech
9. Explain what the connection between project work and student writing is.
10. Explain how you feel about learning in your native language?
 - a. Describe what you feel is the best way to practice your language skills.
 - b. Explain how learning in your native language affects what you are learning in your subject areas.

11. Describe your reflection of the Wilson New Tech program. Include how you feel about the program, your teachers, your peers.
12. Would you like to participate in another PBL? Why or why not?

Appendix F

The Colours of Love

EROS

- Is ready for love and for the risks it will involve, but is not anxiously searching
- Knows definitely what physical type attracts him/her most and is quite demanding
- Begins with a partner who is a stranger at the first encounter – “love at first sight”
- Seeks a deep, pervasive rapport with the partner as quickly as possible
- Shares development and control of the relationship
- Elicits reciprocal feeling from the beloved but does not demand them
- May be exclusive but is not possessive or fearful of rivals
- Considers love to be life’s most important activity
- Idealizes love

LUDUS

- Is not ready to commit to anyone in a love relationship
- Like a variety of different physical types of different physical types and can switch easily from one type to another
- Begins with a stranger who has physical appearance with the lover’s wide range
- Goes on with life as usual after meeting beloved – does not fall in love; no intentions for future
- Avoids seeing partner too often
- May be anxious about the future with a partner who is too intense
- Expects partner to control her/himself and *play* the game for the mutual enjoyment
- Encourages other relationships
- Thinks love is not as important as work or some other activities

STORGE

- Is ready if love comes along but is not looking
- Has no conscious definition of a favored physical type
- Goes on with life as usual after becoming aware of “love”
- More of the type of love that is seen between siblings or friends
- May not be able to pinpoint the moment when friendship turned into love

Appendix G

Mountain Vista Project Contract Template

2/27/17

The Group Contract

Group Members

Role	Names	Contact Information
Task Manager		
Norms Manager		

Group Goals (What will you do to make this project successful)

- 1)
- 2)
- 3)

Group Rules

- 1)
- 2)
- 3)
- 4)
- 5)

Consequences

- 1)
- 2)
- 3)
- 4)

Group Signatures:

Name	Signature

Vita

Nora Paugh was born and raised in El Paso, Texas. After earning her Bachelor of Science degree in Education in 1983, she earned a Master of Science degree in Education with a focus on instructional literacy in 1990. After working as a high school English teacher for 12 years, she earned a Mid-Management certification in Educational Leadership and Foundations. Ms. Paugh worked as a high school administrator for 20 years, 13 of which were as a high school principal. She was accepted into the Teaching, Learning and Culture doctoral program in 2013 with a concentration in Literacy and Biliteracy.

In 2016, Ms. Paugh was awarded the Teachers Federal Credit Union scholarship and the UTEP Travel Grant. After 32 years of service Ms. Paugh retired in 2015, then started working as a research assistant and part time lecturer at UTEP's College of Education. Ms. Paugh has published her research in the *Journal of Hispanic Higher Education* and has presented at various conferences including the Sun Conference, Write for Texas Summer Institute, and the 14th Inter-American Simposio on Ethnographic Research in Education. Ms. Paugh will present her dissertation research at the Annual New Tech conference in July 2018.

Ms. Paugh's dissertation entitled *Language, literacy and project based learning: An ethnographic case study of a new tech classroom in a high school on the US/Mexico border* was supervised by Dr. Erika Mein.

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