Instructional Effectiveness of non-Latino Professional Learning Community Teams Serving Latino Populations

Charlene E. Farnworth
Brigham Young University

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

BYU ScholarsArchive Citation
Farnworth, Charlene E., "Instructional Effectiveness of non-Latino Professional Learning Community Teams Serving Latino Populations" (2018). All Theses and Dissertations. 7361.
https://scholarsarchive.byu.edu/etd/7361

This Dissertation is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen amatangelo@byu.edu.
Instructional Effectiveness of Non-Latino Professional Learning
Community Teams Serving Latino Populations

Charlene Ella Murray Farnworth

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy

Scott E. Ferrin, Chair
Pamela R. Hallam
Sterling C. Hilton
E. Vance Randall
A. LeGrand Richards

Department of Education Leadership and Foundations
Brigham Young University

Copyright © 2018 Charlene Ella Muray Farnworth
All Rights Reserved
ABSTRACT

Instructional Effectiveness of Non-Latino Professional Learning Community Teams Serving Latino Populations

Charlene Ella Murray Farnworth
Department of Educational Leadership and Foundations, BYU
Doctor of Philosophy

As Latino English language learners (ELL) flood national classrooms their non-Latino, English-speaking teachers are faced with meeting the academic needs of limited English proficient students who hail from cultures unlike their own. This study investigated actions taken by teams of non-Latino, English-speaking educators of Latino (ELL in order to be effective teachers of this minority population.

Two premises prompted the search for what enabled non-Latino English speakers to be effective teachers of this minority population. The supposition was that the non-Latino teacher of ELLs must have: (a) familiarity with the language of the minority; and (b) a high affinity for Latino cultures to affect learning. Support for neither premise was found in this research. However, a mediating factor emerged showing that teams who were successful in moving toward instructional effectiveness for their ELLs incorporated other professionals in the building. These additional team members spoke the minority languages and were familiar with the minority cultures.

Two avenues of action found through rigorous readings was the focus of this research. Each was found to be beneficial in moving a collaborative team toward instructional effectiveness for their Latino ELLs. The first is for the team embedded within the bounds of a Professional Learning Community (PLC to team well adhering to the principles of the PLC. The second is to build an environment of trust within the team. Implications for future research could include a comparison of PLC element and trust facet strength in a multicultural setting as opposed to a single minority.

Keywords: Professional Learning Community, English-language learner, Latino, trust, instructional effectiveness, non-Latino teachers
ACKNOWLEDGEMENTS

This dissertation, while a life challenge, is also an enormous step in personal academic growth. There are no words sufficient to extend the love and devotion I feel for my family. It would have been impossible to move forward in my educational journey without the faithful support of my husband, Van, who has patiently borne endless hours of alone time while I pressed forward to meet my goal. I am grateful to our son, Marc, his wife Cami, and their son, Jordan, for unceasing encouragement and the admonition to not ever give up. I express gratitude to my recently departed father who set me on the road to lifelong education by example and provision. His influence has been most powerful. To my beautiful long-departed mother, I express my gratitude for her steadfast belief that her children could accomplish anything that they set their hearts to. I express love for my siblings and their concern for my academic progress.

I would also like to thank my committee. I acknowledge the support of Scott Ferrin, Chair, who has, with unending patience, read and reread a mountain of manuscripts and continually counseled with wisdom and guidance toward successful academic writing. I am grateful to each of my committee members for encouragement, correction, and pointing the way toward the light at the end of the dissertation tunnel.

Above all, I express my love and gratitude to a kind and loving Heavenly Father. It is He who has afforded me this singular opportunity and comforted me on more than one apprehensive occasion during this journey. It is my joy to be of service to Him.
TABLE OF CONTENTS

TABLE OF CONTENTS ........................................................................................................ iv
LIST OF TABLES .................................................................................................................... vi
LIST OF FIGURES ................................................................................................................ vii
DESCRIPTION OF DISSERTATION STRUCTURE ............................................................... viii

Introduction .......................................................................................................................... 1
  Collaborative Teaming .................................................................................................... 3
  Trust ................................................................................................................................. 5
Statement of Problem ........................................................................................................... 5
  Statement of Purpose ....................................................................................................... 7
  Research Questions ........................................................................................................ 7
Methods .............................................................................................................................. 8
  Sampling and Data Collection ....................................................................................... 8
  Instruments ...................................................................................................................... 10
  Participants ...................................................................................................................... 11
Case Descriptions ............................................................................................................... 12
  Procedure ....................................................................................................................... 13
  Research Design ........................................................................................................... 14
  Data Analysis ................................................................................................................ 14
Findings .............................................................................................................................. 18
  Findings Regarding Question 1: PLC Elements ......................................................... 18
  Findings Regarding Question 2: Trust and Observed Team Actions ....................... 22
  Cultural Connection ....................................................................................................... 25
LIST OF TABLES

Table 1 *Research Site Demographics* ........................................................................................................ 39
Table 2 *Descriptive Analysis of Research Participants* ............................................................................. 39
Table 3 *Frequency of Possible Themes Found Through Axial Coding* ...................................................... 40
Table 4 *PLC Team Likert Self Evaluation of PLC Element Effectiveness* ................................................ 40
Table 5 *Trust Element Survey Likert Mean Scores* .................................................................................... 41
LIST OF FIGURES

Figure 1. The socially situated premises bounded by the PLC organizational model ............... 42
Figure 2.1. A depiction of the foundational conceptual framework of this study ................. 42
Figure 2.2. Support Staff is shown as a mediating factor ................................................. 43
Figure 3. A commonly accepted view of the elements of trust based on Tschannen-Moran & Hoy’s model (2003) and Hallam and Hausman’s (2009) interpretation of the role of trust as a fulcrum in school reform. ........................................ 43
DESCRIPTION OF DISSERTATION STRUCTURE

In compliance with supported formats by the McKay School of Education at Brigham Young University, this dissertation *Instructional Effectiveness of non-Latino Professional Learning Community Teams Serving Latino Populations* is written in a hybrid journal-ready format. The journal-ready format satisfies traditional dissertation requirements and journal publication format requirements.

This journal-ready article includes four appendices. Appendix A is a Review of Literature. Appendix B is the extended methods of this dissertation. Appendix C contains the assessment instruments used in this research. Appendix D is the consent form required by the IRB department of the university and research sites for research to be performed.

The journal selected for submission of this dissertation is the *Journal of Ethnographic and Qualitative Research*. The journal-ready portion of this dissertation conforms to the requirements for submission to this journal: namely, a manuscript length not to exceed 35 pages, excluding cover page, abstract, acknowledgement, figures and tables. Figures and tables are added at the end of the text.


Introduction

This study examines approaches taken by non-Latino educators who serve Latino English language-learner students in an effort to assure instructional effectiveness for this specific population. According to the 2010 U.S. Census, the Latino minority is the most rapidly growing minority group in the nation. This census also discloses that 20% of the national student population is Latino. The Latino population projected to increase 188% by the year 2050 (U.S. Census Bureau, 2010). Growth at such a precipitous rate will unavoidably result in continued impact on schools with a requisite focus on these students’ educational needs.

Studies on cultural diversity in the classroom posit that the greater diversity that exists in a class, the more teacher instructional effectiveness could decline (Fields, 1999; Smith, 2006). According to this theory, teachers with less knowledge of a minority culture will be less effective instructors and, ultimately, will reduce student academic opportunities. The 2010 U.S. Census Bureau reports that 94% of educators in the United States are non-Latinos.

In line with this cultural diversity theory, rigorous readings in preparation for this study led to two socially situated premises that merit examination. The first is that to be an effective teacher of Latino students with limited English proficiency (LEP), or the more familiar term, English-language learners (ELL), one must be at least conversant in the language(s) of the Latino community. The second premise is that a teacher must have a social connection with or affinity for Latino cultures to achieve instructional effectiveness for these students, as shown in Figure 1.

<Insert Figure 1 here>

Readings that focus on reaching Latino students led to the aforementioned premises. According to cultural research, factors that lead to instructional effectiveness for the non-Latino educator of Latino ELL’s include school community involvement (Gándara & Contreras, 2009;
Irizarry & Raible, 2011; Nieto, 2002), recognition of, and accommodation, for factors that affect learning by students in non-dominant cultures (Tileston, 2011), and familiarity with minority students (Wayman, 2002).

Researchers Fleming and Monda-Amaya (2001) claim that instructional effectiveness is vital to student academic outcomes. Just how vital is revealed in further research by Darling-Hammond (2004): after three successive years with ineffective teachers, the likelihood of a student recovering academically is slim. For the student who is LEP/ELL, this is unfortunate news since newly arrived immigrants with no English ability can take anywhere from three to 10 years to reach English proficiency (Ding & Sherman, 2006; Dixon, et al.2012; Gándara & Contreras, 2009; Slama, 2012; Yeo, Ang, Chong, Huan, & Quek, 2008). From this body of research, it seems that making every academic year count for the English-language learner is critical.

A review of research on instructional effectiveness seems to point out that there are at least two approaches teachers can follow to make every year count for all students, including English-language learners. The first is to team well, and the second is to build an environment of trust within the team. Teaming, for the purposes of this study, is defined as a collaborative effort with a focus on a common objective coupled with student outcome analysis (DuFour, 2004). Richard DuFour goes on to state that collaborative teaming can lead to improved instructional effectiveness for the team as a whole and higher levels of student academic achievement (see Figure 2.1).

<Insert Figure 2.1 here>
An environment of trust is an integral part of instructional effectiveness because, as Tschannen-Moran and Tschannen-Moran (2011) point out, “creating an atmosphere where collaboration can thrive includes the significant factor of building a climate of trust” (p. 308).

**Collaborative Teaming**

Research suggests that the professional learning community (PLC) is an organizational environment where teacher instructional effectiveness through teaming can successfully develop (Doolittle, Sudeck, & Rattigan, 2008). Identifiable and measurable characteristics of a PLC are found in six elements: (a) shared mission, vision and values, (b) collective inquiry, (c) a collaborative culture, (d) action research, (5) continuous improvement, and (e) a focus on results (DuFour, 2004). There may be some confusion between the definitions of PLC elements *collective inquiry* and *action research*. For the purposes of this study, collective research is defined as the process of building shared knowledge and clarifying questions. Whereas action research is inquiry instigated to solve a pressing challenge and provide effective recommendations.

Researchers note that the PLC as an organizational model includes a strong method of teaming to achieve school reform and advancement. This concept is significant to this study because, as literature on the PLC suggests, successful school reform may signal academic outcome improvement for the individual student (Hord, 1997). Stoll and Seashore-Louis (2007) agree and go further to identify the purpose of a PLC as that which is “essential for bringing about substantial and successful change in school policy and practice to improve pupil learning and attainment” (p. 405).

Knowing that the term *collaboration* can be defined as a qualitative evaluation of the quality of work done in a team, it is used in this study in the following way. Team collaboration,
for the purposes of this study, is viewed as an essential part of the PLC that takes place as teachers meet together as grade level or content area teams. At weekly meetings teachers discuss mutual objectives, examine common student outcomes and analyze measurable achievement. Team collaboration is an integral part of the journey toward instructional effectiveness. What starts out as a group of teachers assigned to a common grade level can progress to a team with a common focus and eventually become a powerful team of change agents through collaborative efforts. The definition of collaboration may change at any point along the path depending on how well a team works together. The value judgment of when the team has reached collaboration at any one time is difficult to call, however, PLCs by their very nature, enable collaboration to generate.

As was previously pointed out, limited English proficiency is an indicator of risk for student academic achievement (Darling-Hammond, 1997; Hunt, Soto, Maier, & Doering, 2003). In behalf of at-risk students, Hunt and colleagues (2003) assert that a “collaborative teaming process offers ongoing opportunities to generate novel methods for individualizing learning” (p. 317). DuFour and Eaker (1998) agree with this claim and point out that team empowerment is an example of instructional effectiveness at its finest.

[This] powerful collaboration . . . is a systematic process in which teachers work together to analyze and improve classroom practice. Teachers work in teams engaging in an ongoing cycle of questions that promote deep team learning. This process in turn leads to higher levels of student achievement. (DuFour, 2004, p. 9)

A collaborative sharing of pedagogy, individual proficiencies, and insights into individual student achievement may be the school’s most prized resource to enhance teacher effectiveness. An examination of research regarding collaboration points to the opinion that an effective
A collaborative environment is reliant on a foundation of trust (Waltman, Bergom, Hollenshead, Miller, & August, 2012). This may be so because of the social capital that collaboration tends to build. Tschannen-Moran (2011) points out that building social capital through team collaboration in an atmosphere of trust is essential to developing exemplary schools.

**Trust**

Some research, such as Stoll and Seashore-Louis, (2007) and Tschannen-Moran (2001), indicates that trust may be considered vital to the success of a PLC team, which makes team members vulnerable and open to one another through sharing student data. Trust has been defined as an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the other party is benevolent, reliable, competent, honest, and open (Hoy & Tschannen-Moran, 1999). According to this definition, trust can be a facilitator of taking chances and encouraging team cooperation.

Tschannen-Moran and Hoy (1997) suggest that trust is essential in facilitating members of a team to challenge each other’s opinions and procedures. Webb, Vulliamy, Sarja, Hamalainen, and Poikonen (2009) also note that trust aids a grade-level team in innovating and taking collective risks. Therefore, it may be inferred from research on trust that teachers who value membership in a successful grade-level team will make an effort to keep team trust strong and balanced.

**Statement of Problem**

The research population of interest is a low-income demographic with a relatively large group of Latino ELL students. The minority populations of the selected research sites range from between 33% to 54% of the school population. Minority groups at the selected research sites include *African Americans, American Indians, Asians, Pacific Islanders,* and *Multiple Races* all
of which are N<10. The Hispanic/Latino minority in these sites makes up between 43% to 52% of the minority population at each site. The ELL subgroup is between 30% to 40% of the overall aggregated minority population of all research sites as shown in Table 1.

<Insert Table 1 here>

ELL student status, for the purposes of this research, and for the school district that encompasses the research sites, is defined as a student who is tested semiannually using the World-class Instructional Design and Assessment (WIDA) and has not exited the ELL program. Designations for ELLs assigned to the WIDA scale in ascending order are: Entering, Emerging, Developing, Expanding, Bridging, and Reaching. When a student successfully completes the Bridging level he is considered to be on par with a native English speaker for his age level and ready to exit language tutoring classes.

According to Marzano and Kendall (1996) students from poverty and minority backgrounds tend to begin school with one half of the middle-class vocabulary necessary for success in school. “Add to that the fact that eighty-five percent of any state’s high-stakes test is based on vocabulary and you have a double whammy on the success of minority and poor children” (Tileston, 2011, p. 50). Mindful of this concern for ELL academic success, Sosa and Gomez (2012) make a passionate plea that each ELL be offered a seat in the classroom of a highly effective teacher.

Focus on the 2010 U.S. Census report that discloses the fact that 94% percent of educators in the United States are non-Latinos, whereas 20% of the U.S. student population is Latino, may make non-Latino educators nervous about their ability to deliver effective instruction to this specific population. Recent research points to the concern that Latino ELL students’ education will suffer if their teachers, Latino or non-Latino, do not provide quality
education for them. The demand for highly effective instruction for Latino students who are ELL is paramount (Darling-Hammond, 2010; Sosa & Gomez, 2012).

Statement of Purpose

Since studies reveal that teachers in schools with high ELL populations are already keenly aware of the challenge they face to boost ELL academic outcomes to acceptable growth levels (Darling-Hammond, 2010; Echevarria, Vogt & Short, 2008) therefore, further investigation of this phenomenon seems to be fitting. This research investigation sought to understand how non-Latino teachers meet the needs of their Latino ELL students.

The primary objective of this study is to investigate what steps non-Latino English speaking teachers take to assure instructional effectiveness for all of their students, including their Latino ELL population, while situated in a PLC organizational model in which trust is fostered. A secondary purpose is to test the premises that to be an effective teacher of Latino ELL students one must be familiar with the language(s) of the Latino community and have an affinity for, or a social connection with minority student cultures.

Research Questions

To help discover what an effective non-Latino teacher of Latino ELL students does to assure optimum learning, two research questions are addressed:

1. What PLC elements do teams use to achieve instructional effectiveness (including knowledge of the minority language and minority cultural familiarity)?

2. How does trust impact the work of the PLC team as they work together for all students, including their ELL students?

These questions are based on research that points toward the PLC model as a strong organizational structure. An environment of trust has been known to strengthen team members in
their quest for reform (Webb, et al., 2009). Therefore, a focus on teaming and trust is a beneficial course of investigation.

Methods

Data were gleaned from the inside perspective of the participants by using open-ended questions in private face-to-face interviews in this study. Discussion questions surrounding survey opinions were imbedded in the interview. Each interview lasted approximately 30 minutes. All interviews were held in the individual teacher’s classroom at each research site. Each interview was audio recorded for accuracy and to provide evidence of research reliability, to ensure validity and to reduce researcher bias. The interviews were taped and transcribed. Audio spot audits were used to assure accuracy of all transcripts.

After the first site interviews were completed, a check of question appropriateness was performed. An audit was made of transcript comments. Concerns regarding richness of content and research direction were considered. Once the researcher felt secure that the interview questions significantly added more data to the research investigation, the rest of the face-to-face interviews at other research sites ensued.

Interview recordings were transcribed and sent to each participant in email format for approval. Once participant approval was received the transcription was filed in preparation for analysis. This manner of member checking provided a test of reliability through triangulation and was supported by the consistent, faithful record of a research log.

Sampling and Data Collection

The sampling design for this research was purposive. Four schools were selected as research sites within the same city and school district. These schools were settled on as research sites because of their demographic and economic similarities.
Teacher teams at each school were selected because of their fourth-grade teaching assignment. A fourth-grade sample was specifically chosen because of its potential as a point of division among the other elementary grades. Fourth grade is sometimes referred to as \textit{slump year}, a term used to describe the phenomena of a significant downward academic trend (Sanacore & Palumbo, 2009; Stockard & Englemann, 2010). The fourth grade is also a national checkpoint chosen by the National Assessment of Educational Progress (NAEP) report card as one of three checkpoint years, the other two being the eighth and eleventh grades. The national assessment outcomes from these years are used as national achievement benchmarks. Therefore, fourth grade was deemed to be a potentially fruitful grade of focus.

Of the four teams selected as participants in this study, three consisted of three team members while the fourth consisted of two members. The school where the two-member team was assigned had undergone a recent decrease in student population in the fourth grade. This reduction necessitated a reduction in force resulting in the loss of one team member reducing the original three-member team to two.

There were three sources of data in this research: researcher observation; recorded interviews; and researcher-read/participant discussed surveys. Such data was collected at each of the school sites. Initial observation visits were made to each of the four research sites during team collaboration meetings. The aim of these observational visits was to gain a sense of collaborative exchange among team members and to perceive a general feeling of cohesion.

Individual face-to-face interviews with each of the participants followed observation visits. Open-ended questions were posed to each participant with the goal of gaining insight to the two core research questions:
1. What PLC elements do teams use to achieve instructional effectiveness (including knowledge of the minority language and minority cultural familiarity)?

2. How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?

Interview questions were divided into two categories. Open-ended questions were aimed at eliciting answers regarding instructional effectiveness for the Latino population in the classroom, which includes ELL students and English proficient students. Those questions included the following initial questions that opened the interview for discussion.

1. What instructional strategies are used to meet the needs of English Language learners for whom this team has responsibility?

2. How did you prepare yourself personally for teaching Latino English language learners?

3. What is your second language experience?

4. What steps are taken at this school to understand the Latino cultures, parental expectations of educators, and their own parenting responsibilities?

**Instruments**

The second category of questions was posed during the discussion and rating of surveys. These questions were clarifying in nature and focused on Likert scale responses on each of two surveys. The question posed was: “As you consider the Latino ELL population of your grade level, using a Likert scale of 1–5, 5 being highly effective, how would you rate your team on effective teaming?” A survey based on DuFour’s (DuFour, DuFour, Lopez & Muhammad, 2006) `PLC continuum rubric asked for ratings of four PLC elements using a Likert scale: (a) teachers working together; (b) engagement in action research; (c) focus on continuous improvement; (d)
focus on student results. The PLC survey used in this study excluded two PLC elements: (a) shared mission, vision, and values; and (b) collective inquiry. The reason for this exclusion is that district policy maintains that these elements are embedded in the function of the district organizational model and not open for alteration at a team level. Including them in this study’s survey would not yield answers to the core research question regarding elements a team uses to achieve instructional effectiveness.

The second survey was based on Tschannen-Moran and Hoy’s *Faculty Trust Scale* (2003). The purpose of this survey was to gather data regarding the second research question: “How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?”

To approach the subject of trust a survey based on Tschannen-Moran and Hoy’s (2003) *Faculty Trust Scale* was introduced. The question posed was: “As you consider the Latino ELL population of your grade level, using a Likert continuum of 1–5, 5 being most effective, how would you rate your team on the following elements of trust: openness, honesty, competence, benevolence and reliability?”

**Participants**

Participants in this study were elementary educators with varying years of experience spanning one to more than twenty years. All participants were non-Latino with varying second language experience (see Table 2). These research subjects are all employed by the same school district and are assigned to teach at schools heavily impacted by Latino ELL populations within the same city.

<Insert Table 2 here>
Case Descriptions

Team A was a newly formed three-member team. One teacher was a veteran of the fourth grade. The other members brought experience from fifth and sixth grades. None of these teachers were fluent in the Spanish language. One had a special interest in the Hispanic culture and participated as a coach in after-school sports that interested Latino students. Observation of this team collaboration meeting indicated a team interested in student success. Class sizes were small at this research site with approximately 20 students per class. This team collaborated with a clear agenda and produced artifacts showing evidence of PLC element adherence such as sharing a mutual objective, using student data to drive the conversation and planning action research. The collaborative conversation was focused on student outcomes of a recent common assessment. Year-end Student Assessment for Growth and Excellence (SAGE) English Language Arts (ELA) scores for Team A ELLs were between 20 and 29% proficient (USBE, 2015).

Team B was professional, organized and had experience working together with their Latino ELL population. None of the teachers on this three-member team were fluent in the Spanish language. Class sizes were small with approximately 18 students per class. From initial observation and use of team artifacts such as a team agenda and instructional materials, it appeared that this team was serious about attaining increased student achievement. End–of–year SAGE scores for Latino ELLs showed that ELA scores for Team B were in the range of 11–19% proficient (USBE, 2015).

Team C was an established three-member team with one new member. The new member on this team was balancing membership on two teams, the fourth-grade team and dual immersion. Efforts to include this new member were evident. The dual immersion teacher was the only team member fluent in Spanish. Initial observation verified that input from all team
members was welcome and consistently invited. This team collaboration was focused on student data. Goals were formulated toward increased instructional effectiveness at small, measurable increments. There was a feeling of professional cohesiveness on this team. Class size at this research site was approximately 22 students per class. The school community held an annual Hispanic cultural celebration. Year–end SAGE ELA score for ELL students taught by Team C were between 20 and 29% proficient (USBE, 2015).

Team D was a small two–member team. Initial observation of Team D exposed a disjointed team. It was difficult to discern the focus of team collaborative discussion. One PLC element evident during this team meeting was use of student data for goal direction. The class size at this research site was larger than the other cases with approximately 25 students per class. A feeling of tension existed on this team. One participant requested to not participate in the face-to-face interview or survey phases of this study. This request was, of course, granted. Only one team member continued to participate in the research at this site. The school where this team was employed held semi-annual Hispanic celebrations with the purpose of engendering cultural understanding and school unity. Neither team member was conversant in the Spanish language. ELL year-end SAGE ELA scores for Team D were <10% proficient. (USBE, 2015; for a more complete description of research participants, see Table 2.)

**Procedure**

In order to satisfy research quality, checks of validity, reliability and triangulation were fulfilled. Triangulation was carried out in the form of member checks. Validity and reliability were addressed in the form of a consistent and thorough research log as well as memos kept during analysis (Flick, 2007; Gibbs, 2007; Miles & Huberman, 1994).
Data for this study were gathered initially from observation at team collaboration meetings. These observation sessions spanned a period of five weeks. Notes taken at the time of observation were kept in separate color-coded files designated for each research site. The purpose of collaborative team observation was to note team interaction, adherence to four PLC principles and discussion surrounding student data. Researcher observation was focused on any evidence of team action relating to the research questions guiding the research.

Face-to-face interviews of each participant yielded further data through use of open-ended questions. Discussion surrounding survey instrument ratings also aided in data collection. These individual meetings spanned a period of four months.

Two survey instruments were presented during the face-to-face interviews. A rubric based on DuFour’s PLC rubric (DuFour, DuFour, Lopez, & Muhammad, 2006) and the trust survey based on Tschannen-Moran and Hoy’s (2003) original instrument. Research Design

Because teaming and trust are both socially situated experiences, qualitative research for this multiple matched case study was used in an effort to discover the perceptions and social context of the participants. Corbin and Strauss (2008) suggest that qualitative research can lend a concrete voice to what was initially only conceptual belief based on a review of literature. Thus, qualitative research was used to step into the world of the participants to hear their voices.

Data Analysis

The Constant Comparison Method (Glaser & Strauss, 1967) was used in data analysis. This classic method of analysis consists of four stages: (a) comparing phenomena applicable to each category, (b) combining categories and their elements, (c) defining the premise(s), and (d) writing the theory. Data coding followed the procedures of open coding or organizing data into
categories, axial coding or comparing categories and selective coding or analytic focus. Qualitative coding for this study was aided by the use of NVivo 11 (QSR International Pty Ltd., 2011), a qualitative analysis software program.

Following the prescribed stages of the Constant Comparison Method an internal comparison of the data transcript of the first teacher interview was made to determine consistency, to establish understanding of the central objective and to create initial coding categories or nodes. Comparison began with the first participant interview and continued with within-case comparisons from the first research site. This process was repeated until all within case comparisons from all research sites were completed.

Across-case comparison was the next step in comparing phenomena. The same procedure was followed until all across-case comparisons were concluded. Within-case and across-case comparisons uncovered emergent patterns during open coding. This steady continuous comparison allowed patterns to form and observations to be enhanced, confirmed or disregarded.

During open-coding, disaggregated data from team observation notes, open-ended interview questions, and discussion comments about instrument ratings were sorted into categories or nodes. Once the first case was coded and organized into nodes, the next case was coded, categorizing it, and compared with the existing data. This process of coding new data, categorizing and comparing it to data that preceded it continued until data from all cases were coded and organized into nodes.

After open coding had reached a point of saturation and when no new information was available, the next step of data analysis, axial coding, was begun. Axial coding, or comparison analysis, evaluated repeated patterns that emerged during open coding. Patterns that created data
clustering were noted during this step of coding. Data clustering opened the way for analytic narrowing or selective coding.

Selective coding analysis pointed toward possible themes for perusal. Mention by more than 50% of the participants constituted the consideration for a theme. In the instance of the survey scores, if the case mean Likert scores were greater than 50% they were then pursued. Significant theme possibilities found through selective coding of this study were: teaming, instructional strategies, action research, continuous improvement, understanding culture, community connection and competence (see Table 3).

<Insert Table 3 here>

Three themes grew from analysis of PLC elements, one from trust elements and the other two from open-ended interview questions. At this point the possible themes were compared to the core research questions for confirmation of relevance. (Boeije, 2002; Strauss & Corbin, 1998). Through use of several descriptive NVivo11 data graphics, pertinent themes were evident, inviting the telling of a narrative.

The theme of PLC teaming was relevant because it fit well with the core research question regarding elements that teams use to achieve instructional effectiveness. Two prominent PLC elements, action research and continuous improvement, were pursued as sub-themes. In order to learn more about PLC elements usefulness regarding instructional effectiveness, the quest for answers led to a within case analysis of survey responses. The within-case analysis was performed for each of the PLC elements. After a within-case analysis of each PLC element in all four cases was complete, an across-case analysis of survey responses was conducted.

Competence was the trust element mentioned frequently enough during analysis, by more than 50% of the participants, to be considered a significant theme. Analysis of competence
opened the door for a comparison of the other four facets of trust and how they related to the second research question: “How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?”

To learn more about the impact of trust elements on the work of the PLC team, a within-case analysis of the *Trust Survey* elements based on Tschannen-Moran and Hoy’s (2003) original instrument was enacted. After the within-case analysis was performed for each of the four cases, an across-case analysis of the five elements of trust was conducted. The coding process for the survey data followed open, axial, and selective coding procedures.

Evidence was sought through interview data of the research participants’ views of the themes of understanding culture and community connection. An examination of this data probed participant’s own beliefs regarding the premises derived from some of the literature base of this research that: (a) to be an effective teacher of limited English proficient Latino students one must be at least conversant in the language(s) of the Latino community; and (b) a social connection with, or affinity for, Latino cultures on the part of the teacher must exist in order to achieve instructional effectiveness for these students. Based on the selective coding analysis, no evidence was found from research subjects indicating they felt that to be an effective teacher of Latino ELL students one must be conversant in the minority language and/or be familiar with the minority culture. Only one participant was fluent in the language of the minority population (see Table 2). Nine of the ten participants spoke of caring for the Latino ELL population during the school day as the social connection they had with their Latino ELL students. Only one participant spoke of an outside–of–school interaction with the Latino ELL school population. “I thought, ‘There are all of these Latino kids who aren’t involved in after school sports.’ My desire
to get them involved in school and after school [activities] has become stronger over the past 10-12 years.” (A1) ¹

Based on team observations, interview analysis, and survey analysis there was variability of opinion regarding PLC element usefulness in moving the team toward instructional effectiveness among cases. Opinions of trust elements impact on the work of the PLC team also varied among cases.

**Findings**

Findings of the research questions and initial premises of this study are noteworthy. Observations and survey results did not reveal instructional or methodological differences for the Latino ELL population. Qualitative analysis unfolded a view of teachers who valued a strong learning environment and who knew that vulnerability required courage. This study’s findings are presented hereafter.

**Findings Regarding Question 1: PLC Elements**

Researchers note that there is a significant link between belonging to a strong learning environment and academic achievement (Bransford, Darling-Hammond, & LePage, 2005). Richard DuFour (DuFour & Eaker, 1998, DuFour, 2004; DuFour, DuFour, Eaker, & Many, 2010) writes that a PLC offers a strong learning environment where every professional in the building is engaged in the pursuit of effective instruction. Being a part of a PLC allows team members to work together, develop tools and methods to create a strong learning community, and capitalize on collective growth. To answer the first research question: “What PLC elements do teams use to achieve instructional effectiveness (including knowledge of the minority language and minority cultural familiarity)?” qualitative and survey data were examined.

¹ References to participants’ comments are identified by a letter and a number indicating research site and participant. e.g. (A1) refers to research site A, participant 1.
An investigation of survey data from DuFour’s PLC rubric (DuFour, et al., 2006). Likert scores was interpreted to signify that team members held varying degrees of agreement regarding PLC element usefulness in guiding them toward instructional effectiveness. Descriptors ranged from not effective to highly effective (see Table 4).

<Insert Table 4 here>

Analysis of interviews and survey results showed evidence of usefulness of all four PLC elements on teams that regarded themselves as successful. These teams felt that they had success as collaborative units in a PLC environment because they worked together, communicated well and could measure instructional effectiveness frequently using an identifiable definition of each PLC element: (a) collaborative teams, (b) action research, (c) continuous improvement, and (d) focus on results.

Analysis of all four Likert items for PLC elements showed that teams A, B, and C considered themselves effective in using all PLC elements to guide them toward instructional effectiveness for their Latino ELLs. Teams A and B scored a mean of 4.2 in the effective range on the PLC survey. Team C also scored in the effective range with higher mean score of 4.4. A Likert survey given to each of the participants yielded the following information (see Table 4). These data highlight that teams A, B, and C were relatively similar in their evaluation of their adherence, as teams, to elements of effective team practices and PLC elements. Team D did not seem to evaluate their adoption of PLC elements in the same way as did the other teams. For a description of PLC element adherence and student outcome correlation.

One participant noted benefits of adhering to PLC elements in an effort to move the team toward instructional effectiveness: “I like that we do that [adhere to PLC elements] because we take responsibility. Because we take responsibility I feel [that] they [the ELL students] are our
students, not mine. They are ours” (C1). In support of the belief that a high functioning PLC offers a strong learning environment where team members can institute methodology to create a strong learning community and make the most of collective team growth one participant stated:

We do [interventions] weekly. So that means they have an extra 2 hours a week of math time for those kids that were below 80% on our math assessments, which has been really nice. We are constantly trying to find ways to improve and monitor the children’s progress. [We have] come up with systems [that] we have improved a lot over the years, which is nice. (B3)

Team D was regarded as unsuccessful as a PLC team by both researcher and team member. This classification was determined because of the difficulty of one team member trying to achieve positive outcomes without effective input from the other team member. The core definition of the PLC as “an organizational environment where teacher instructional effectiveness through teaming can successfully develop collaborative teams” was violated, thus preventing this team from inclusion in the designation of a PLC team (Doolittle, et al., 2008; DuFour, et al., 2006). Although there was only one participant who remained in this research study representing this team, after careful consideration, the decision was made to keep Team D as a part of this study as a counterpoint to the teams who regarded themselves as successful.

Grade level teams in this research that were evaluated as performing well as teams made use of technology provided by the district. Technological tools such as MyOn® (MyOn LLC, 2015), a multilingual leveled reading program, provided individual reading time for ELLs student. Imagine Learning® (Imagine Learning Inc., 2015), which focuses on naming familiar objects in Spanish and English, English spelling tutelage and English speech patterns was also
used as a benefit to ELLs working to master English. These programs, used by successful PLC teams, enhanced learning opportunities for their Latino ELL students.

Cases A, B, and C, who regarded themselves as successful PLC teams, made a practice of including other faculty members, such as aides and specialists, in their search for instructional effectiveness with their Latino ELL students:

I think that when you take advantage of the other resources outside of our team we have some great ones. They help me understand. I understand this child to this point and [the aide] understands this child a little bit deeper in their abilities than I [do]. I love [our ELL aide] she is really a good one for me to talk to and to get some insights from. (C2)

These additional faculty members within the building, who have expertise, seem to be regarded by the grade level teams as part of their team as partners who provide support for the team and its goals for its students. This feeling of high regard was voiced by one participant: “We realize that we can’t reach our low, low kids [by ourselves]. So, we need others [for support]” (C3). Pull out help sessions by these other faculty members ranged from conversation skill practice to a separate class for newcomers as part of a school wide dual language immersion program.

This new finding generated another avenue of thought. The inclusion of additional team members appeared to be a moderating factor in the relationship between instructional effectiveness and ELL student learning. The fact that these aides and specialists were conversant in the minority language and had familiarity with the minority culture appeared to have an impact on the relationship between instructional effectiveness and student learning as shown in Figure 2.2.
Ultimately, to achieve instructional effectiveness for Latino ELL students the non-Latino teacher can rely on good teaching strategies. Educators of Latino ELL students can multiply the effectiveness of their efforts by accessing the expertise of others in the building and resources provided by the district.

**Findings Regarding Question 2: Trust and Observed Team Actions**

According to Richard DuFour (2004), team members in a high-functioning PLC disclose common student scores to one another, make collective inquiry on how instructional improvements should be made, and hold one another accountable for common decisions. These collaborative practices can leave team members feeling vulnerable if not founded on sure principles of trust. Research on trust states that teacher instructional effectiveness is significantly and positively linked to trust in colleagues (Bryk, Harding & Greenberg, 2012; Tschannen-Moran, 2001). Trust, therefore, is accepted as a vital component for teacher teams that embrace the PLC organizational model and achieve successful team status, which actions can, in turn, lead to increased instructional effectiveness.

A survey based on Tschannen-Moran and Hoy’s (2003) *Faculty Trust* survey was used to examine the second research question: “How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?” Initial exploration of participants’ perceptions of the impact that trust had on their work together was measured using survey data of each of five elements of trust identified by Hoy and Tschannen-Moran (1999). Interview data and observation notes added depth to a picture of trust and the impact of trust elements on the work of the PLC team.
An analysis of trust elements based on Tschannen-Moran and Hoy’s (2003) original trust survey instrument was given to all participants. Analysis of the mean scores produced by the survey seemed to indicate that teams that worked to engender an environment of trust also rated themselves as functioning well together as shown in Table 5. Overall aggregated mean scores for trust elements at each research site ranged in ascending order from 1.9 to 4.8.

Data analysis of the trust survey showed overall mean scores for Teams A, B and C in the trustworthy range. The overall mean score for Team D fell into the highly untrustworthy range. A closer look at each team and their perceptions of the impact of trust on their team as they worked toward instructional effectiveness for all of their students, ELLs inclusive, is presented in the following descriptions.

The mean Likert score of 4.5 for Team A placed them in the trustworthy range. One participant on this team expressed a positive view toward teamwork where trust was present. “On this team I can speak. We are not quite in perfect sync will all of our responsibilities yet. It [our efforts with the ELLs] is solid though” (A1). Speaking specifically of trust elements, honesty and competence, one participant voiced a common view: “I think that we are comfortable being completely honest with each other. I can really trust their good ideas because we are three strong, competent teachers” (A3).

Team B scored an overall mean of 4.3 on the trust survey indicating a perception of team trustworthiness. Analysis of each of the trust elements showed that the general view of team members was that their team benefited from the influence of trust elements. Affirming the benefit of team trust on their team one participant focused on the element of competence. Speaking of her teammates she said:
[They] are totally competent. I am always really impressed with the way things [are] set up. It [competence] speaks to a child’s sense of order as well as independence, structure and support. I think that is a talent of a good teacher, which I really am still learning. (B2)

The trust survey analysis for Team C presented a mean score in the trustworthy range at 4.8. This unusually high score was noteworthy because it signified a high level of trust between teammates. One participant expressed how team trust affected their quest for instructional effectiveness while centering on the element of honesty: “[Our team has the] ability to say, ‘I’m not there yet.’ We may need to go back, or maybe we need to stay focused right here for a little bit longer. We can be honest with each other” (C2).

Team D lagged behind the other teams with an overall mean score of 1.9 on the trust survey placing them in the highly untrustworthy range. Analysis of the trust survey, researcher observation and interview data confirmed that this was a broken team. This finding also supported research on trust that significantly links teacher instructional effectiveness to trust in colleagues (Bryk, Harding & Greenberg, 2012; Tschannen-Moran, 2001).

Researchers emphasize that trust is an essential part of a successful organization (Hoy & Tschannen-Moran, 1997, 2007). Hallam and Hausman (2009) suggest that, similar to the use of a pivot point on a fulcrum, as shown in Figure 3, there must be a delicate balance of the elements of trust for effective teaming.

Tschannen-Moran (2001) reports that the expectation of a high trust environment leads to a greater sense of efficacy among teachers. Her study further reveals other benefits from the existence of trust in a PLC such as cooperation, constructive collaboration and a support system.
Cultural Connection

Literature behind this research seems to point out that in order for a teacher to be an effective instructor of ELLs who are Latino, (a) one must be at least conversant in the language(s) of the Latino community, and (b) a social connection with, or affinity for, Latino cultures must exist. However, evidence of these literature-based premises was not found in this study.

Findings showed that of all ten participants, only one was fluent in the language of the minority population. Only one participant had a background of social connection with the Latino culture. Two participants had extensive experience with the Eastern European culture and languages, while two had a background with several non-Latino cultures, the majority of which were Asian. Even so, analysis of this study showed that these teachers’ Latino ELLs were not academically lagging behind other teams’ Latino ELL populations. This significant finding may be noteworthy to non-Latino teachers of Latino ELL populations in that it appears their lack of two factors; ability to speak the minority languages and an affinity for the Latino culture did not seem to preclude positive learning outcomes for students when working effectively as teams.

Discussion

The purpose of this study was to find what approaches a non-Latino educator could employ to be an effective teacher of limited English proficient (LEP)/ELL Latino students in a PLC organization. Using research on instructional effectiveness as a guide, two approaches were pursued. The first was a focus on collaborative teaming as part of a PLC. Teaming was defined as a collaborative effort with a focus on a common objective coupled with student outcome analysis (DuFour, 2004). To understand the effect of teaming on instructional effectiveness a
research question was posed: “1. What PLC elements do teams use to achieve instructional effectiveness (including knowledge of the minority language and minority cultural familiarity)?”

The second approach was a focus of the environment of trust within the team. A research question was born of readings on trust (Tschannen-Moran, 2001; Webb et al., 2009):

2. “How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?”

These two research questions guided the research, analysis, and findings of this study. An outcome of this study supports previous research on collaborative teaming and trust, adding to the thought that effective collaboration is subject to a foundation of trust (Tschannen-Moran & Hoy, 1997). Participants reported that, as suggested by Webb and colleagues (2009), having trust present on their teams aided them in taking the collective risks necessary for a team to enjoy ongoing advancement.

**Successful Team Organization**

Four PLC elements—action research, collaborative culture, continuous improvement, and focus on results—were measured against the district’s organizational model expectations. Research participants who considered themselves a part of a successful team, as indicated by Likert mean scores on the PLC survey, were in agreement that evidence of adherence to these four PLC elements was present on their teams. Researcher observation notes and qualitative analysis of participant comments supported this view.

Notwithstanding the differences between three teams that considered themselves as effective collaborative teams, this study’s findings are in agreement with Hunt and colleagues (2003) that collaborative teaming presents opportunities to develop innovative individualized
learning methods for students. Extra resources, such as aides, who provide one-on-one learning activities, become part of the collaborative team. One participant reported,

I have a student new from Mexico. No English at all. She is with an aide daily on a [technology] program for about an hour, which is nice because you can see the progress she is making by just being in class. I can tell how much of a difference that program is working for her. She gets more of the one-on-one attention. She is so excited for that too. (B2)

Closely aligned with the findings of DuFour (2004), this study found that the process of searching for improved instructional strategies promotes multifaceted team learning, which leads to higher levels of achievement. One participant noted,

We are constantly looking for ways [to improve ELL instruction]. I think we really have a system down for math and over the past few years have continued to look for ways with language arts, to help them become better writers. (B3)

The success found by reaching out for innovative instructional strategies and extra resources on other teams is contrasted by the experience of Team D, which was not considered successful as a collaborative team. Participant self-admission, researcher observation, notes, and qualitative analysis pointed toward an unsuccessful effort. This team struggled to adhere to PLC elements. It appears that because only one team member was fully engaged and striving to participate, the opportunity for team learning and higher levels of student achievement was diminished. They, more than any other team in this study, did not reach out to include technology and/or extra resources to serve their Latino ELL student population.

I think that when I [consider] what we do during our team collaboration time that is directed towards the ELLs. ‘Oh, often times it is not very different from what we are
doing for non-ELLs.’ Because we find when we have certain expectations and we treat them the same, they more often than not meet our expectations. (D1)

Participants representing teams that regarded themselves as successful rated the four PLC elements as valuable to teaming in the following order: action research, collaborative culture, focus on results, and continuous improvement. Those teams that deemed themselves successful felt that all four elements were essential for improved instructional effectiveness. One participant voiced a common opinion:

I feel like I am a better teacher having those goals in mind that we make in the summer time and then continuing to check on [them] every Monday. We collaborate with each other’s ideas and find ways to reach other’s students whether it is through extra interventions or what not. But I feel like that, to me, is the biggest part of collaboration. We rotate and [assign] one teacher per week to take those students [for whom] we receive data that [show] they are below benchmark and then give them the intervention or something [that] they need to get them back up. (B3)

This reflection supports the theory suggested by Hunt and colleagues (2003) and DuFour (2004) that the search for improved instructional strategies encourages not only individualized learning opportunities for students but also versatile team learning.

Critical to meeting the needs of Latino ELL students, this versatile team learning spoken of by Hunt and colleagues (2003) and DuFour (2004) includes the involvement of additional team members. Teams who regarded themselves as successful in moving toward instructional effectiveness for their Latino ELLs included aides as extended teammates. One participant noted the benefit of having additional support. “Some [colleagues] feel like they should be able to do it all. They haven’t learned that it is ok if they don’t” (C2).
An Environment of Trust

As noted previously by Bryk and colleagues (2012), teacher effectiveness may be the most important factor in student success. According to Tschannen-Moran (2001), the collaborative sharing of pedagogy, individual proficiencies, and student insights may be the school’s most prized resource to enhance teacher effectiveness. She believes that this may be so because collaboration tends to produce the social capital essential for exemplary schools. She further points out, “Creating an atmosphere where collaboration can thrive includes the significant factor of building a climate of trust” (p. 308). Building an environment of trust in a collaborative team seems to be central to improved instructional effectiveness. Each of the five elements of trust, as mentioned by Hallam and Hausman (2009), impacted each case in this study by their presence or notable absence.

Based on researcher evaluations and team Likert ratings, there appears to be a connection between an environment of trust and effective collaborative teams in this study. It appears that those teams that have a higher level of adherence to PLC elements and enjoy higher levels of collegial trust have higher levels of team performance, by their own evaluation. This increased level of team performance may lead to higher levels of instructional effectiveness. Based on this study’s analysis, in successful collaborative teams, the Latino ELL population is noticed, tracked and truly seen by their teachers. They are recipients of effective instruction because of the power engendered in a high functioning PLC organization through collaborative team adherence to PLC and foundational trust elements.

Implications for Practitioners

This study is applicable to teachers who are faced with the task of teaching a minority population whose culture they do not share. Support for instructional effectiveness can be found
in a team founded on proven principles of a PLC organizational model. Acts of meeting
frequently in collaborative sessions to engage in action research, fostering a collaborative
culture, seeking continuous improvement and focusing on student results may aid in the search
for instructional effectiveness.

Interlacing elements of trust in a collaborative team situated in a PLC organization may
strengthen the team constitution. PLC elements; competence, honesty, benevolence, reliability,
and openness are foundational to a teacher’s perception of his or her own ability. Other
advantages of ensuring an environment of team trust for the teacher of a minority population are
cooperative teamwork and a support system.

Administrators of schools populated by a minority culture may need to be aware of and
familiar with language support technology. Considering the significant benefit of classroom
aides who support Latino ELL students, funding needs to be directed toward hiring support
personnel. Emphasis on an organizational model founded on PLC elements may benefit the
school as a whole as faculty and staff members strive for improved instructional effectiveness.
Developing an environment of trust founded on trust elements may bring the benefit of a sense of
security through a support system for all involved.

Limitations and Implications for Future Research

The limitation of this qualitative study is the small research sample. This small research
sample was complicated by the withdrawal of one member of a two-member team. A larger
study sample may shed a light of interest regarding instructional effectiveness where a broader
spectrum of diversity exists.

Extension of this work that can add to an existing body of research may be applied to
other minority languages and cultures in an elementary school setting. A multicultural setting
where a broad spectrum of diversity exists could shed further light on requirements of instructional effectiveness for several minority populations. A comparison of PLC element and trust facet strength in a multicultural setting as opposed to one minority population would add to current research.

**Conclusion**

This study, a quest for actions taken by non-Latino educators of Latino ELLs in pursuit of instructional effectiveness, concentrated on the lens through which non-Latino teachers viewed their Latino ELL students. That teacher lens allowed them to truly see these students and their specific needs. Two research questions were addressed:

1. What PLC elements do teams use to achieve instructional effectiveness (including knowledge of the minority language and minority cultural familiarity)?
2. How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?

Because reviewed literature proposed that instructional effectiveness could be influenced by a strong learning environment and team trust, these two avenues of theory were pursued. First, during the course of this study, research revealed that adherence to PLC elements offers a strong learning environment. The PLC organizational model may offer a tool to help teams foster a resilient learning environment. This qualitative study supports the idea that there is strength of unity when teams follow PLC organizational elements.

Second, an environment of team trust links instructional effectiveness to trust in team colleagues. It appears that teacher teams that team together collaboratively engender an environment of high trust as suggested by Tschannen-Moran (2011). This environment of trust
benefits the individual teacher as well as the team with cooperation, constructive collaboration, and reinforcement.

The fact is that language differences do exist between educators and students. Of importance in this study is that apparently successful student learning outcomes are connected to teacher instructional effectiveness (Fleming & Monda-Amaya, 2001; Gándara & Contreras, 2009). Findings of this study point out that even when there is no harmony between teacher and student language or cultural differences exist, building a strong learning environment and engendering collegial trust can still positively affect instructional effectiveness.

Regarding the two premises gleaned from the literature at the outset of this study, that to be an effective teacher of Latino ELL students it would be highly advantageous to (a) be at least conversant in the language(s) of the Latino community and (b) have a social connection with, or affinity for, Latino cultures, an important influential factor was discovered. The teams who regarded themselves as successful as a grade level team professional learning community depended on others who are conversant in the minority language and have cultural familiarity for student learning to help enhance student learning. This dependence on others who possess these cultural skills may have acted as a moderating factor in the conceptual framework of this study. This apparent ability of high functioning teams to find and use technological tools, expertise and cultural-lingual resources of other faculty members to enhance student learning is worthy of further research.
References


doi: 10.10170S1742058X0404202X


MyOn® (2015). Personalized literacy Software; MyOn LLC.

NVivo (2011). Qualitative data analysis Software; QSR International Pty Ltd.


doi: 10.1007/s12144-008-9034-x
## Tables

### Table 1

**Research Site Demographics**

<table>
<thead>
<tr>
<th>Site</th>
<th>Minority Population</th>
<th>African Americans</th>
<th>Native Americans</th>
<th>Asians</th>
<th>Pacific Islanders</th>
<th>Mixed Race</th>
<th>Hispanic</th>
<th>ELLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>54%</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>52%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>33%</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>30%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>45%</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>43%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>45%</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>N &lt;10</td>
<td>43%</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

Note. This table shows the minority populations at each research site. Minority groups are also disaggregated to show specific subgroup populations. The total of ELLs at each site is shown in the last column.

### Table 2

**Descriptive Analysis of Research Participants**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Team A n=3</th>
<th>Team B n=3</th>
<th>Team C n=3</th>
<th>Team D* n=2</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>3-15 years</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>20 + years</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Second Language</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Minority language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluent</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Some</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ELL training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TELL certified</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>SIOP trained</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Professional Development courses</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

*One participant on Team D declined to participate in the interview phase of research.
Table 3

*Frequency of Possible Themes Found Through Axial Coding*

<table>
<thead>
<tr>
<th>Elements</th>
<th>Measure</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaming</td>
<td>PLC</td>
<td>100%</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>Research Question</td>
<td>100%</td>
</tr>
<tr>
<td>Action Research</td>
<td>PLC</td>
<td>100%</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>PLC</td>
<td>100%</td>
</tr>
<tr>
<td>Understanding Culture</td>
<td>Research Question</td>
<td>100%</td>
</tr>
<tr>
<td>Community Connection</td>
<td>Research Question</td>
<td>90%</td>
</tr>
<tr>
<td>Competence</td>
<td>Trust</td>
<td>90%</td>
</tr>
<tr>
<td>Focus on Results</td>
<td>PLC</td>
<td>80%</td>
</tr>
<tr>
<td>Honesty</td>
<td>Trust</td>
<td>80%</td>
</tr>
<tr>
<td>Openness</td>
<td>Trust</td>
<td>80%</td>
</tr>
<tr>
<td>Reliability</td>
<td>Trust</td>
<td>70%</td>
</tr>
<tr>
<td>Benevolence</td>
<td>Trust</td>
<td>60%</td>
</tr>
</tbody>
</table>

Table 4

*PLC Team Likert Self Evaluation of PLC Element Effectiveness*

<table>
<thead>
<tr>
<th>Element</th>
<th>Site A Mean Score</th>
<th>Site B Mean Score</th>
<th>Site C Mean Score</th>
<th>Site D* Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Culture</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
<td>2</td>
</tr>
<tr>
<td>Action Research</td>
<td>4.3</td>
<td>4.3</td>
<td>4.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>4</td>
<td>4</td>
<td>4.3</td>
<td>2</td>
</tr>
<tr>
<td>Focus on Results</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
<td>2.5</td>
</tr>
<tr>
<td>All Elements</td>
<td>4.2</td>
<td>4.2</td>
<td>4.4</td>
<td>2.25</td>
</tr>
</tbody>
</table>

Note. Likert survey categories are assigned the following descriptors: Highly Ineffective 1-1.9; Ineffective 2-2.9; Somewhat Effective 3-3.9; Effective 4-4.9; Highly Effective 5
Note: *One team member declined to participate in this survey.*
Table 5

*Trust Element Survey Likert Mean Scores*

<table>
<thead>
<tr>
<th>Research Site</th>
<th>Openness</th>
<th>Honesty</th>
<th>Competence</th>
<th>Benevolence</th>
<th>Reliability</th>
<th>Overall Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.4</td>
<td>5</td>
<td>4.6</td>
<td>4.3</td>
<td>4.3</td>
<td>4.5</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>4.6</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td>C</td>
<td>4.6</td>
<td>5</td>
<td>4.6</td>
<td>5</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>D*</td>
<td>1</td>
<td>1.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Likert score descriptors: Highly untrustworthy, 1-1.9; Untrustworthy, 2-2.9; Neutral, 3-3.9; Trustworthy, 4-4.9; Highly Trustworthy, 5. Note: *One team member declined to participate in this survey.
Figures

**Figure 1.** A depiction of the socially situated premises bounded by the PLC organizational model. Instructional effectiveness leads to ELL student learning. Conversant in the minority language is shown as a possible mediating factor to the relationship between instructional effectiveness and ELL student learning. A cultural connection between instructional effectiveness and the cultural community of the school is shown as a moderating factor with a possible connection to ELL student learning.

**Figure 2.** A depiction of the foundational conceptual framework of this study: teaming leads to the reciprocal relationship of trust and collaboration, which leads to instructional effectiveness, which in turn leads to student learning. These relationships are bounded by the PLC organizational model.
The PLC organizational model

Teaming → Trust and Collaboration → Instructional Effectiveness → ELL Student Learning

Knowledge of minority language → Additional team members

Cultural Connection

Figure 2.2. A depiction of the foundational conceptual framework of this study. The relationship between collaboration, trust, instructional effectiveness and ELL student learning is bounded by the PLC organizational model. The inclusion of additional team members, such as support staff is shown as a mediating factor to the relationship between instructional effectiveness and ELL Student learning.

Figure 3. A commonly accepted view of the elements of trust based on Tschannen-Moran & Hoy’s model (2003) and Hallam and Hausman’s (2009) interpretation of the role of trust as a fulcrum in school reform.
APPENDIX A

Review of Literature

This literature review seeks to gain understanding of strategies that teachers use to improve instructional effectiveness that produce positive academic outcomes for all students, including Latino English-language learners (ELL). Slama (2012) suggests that specific factors exist that may affect the relationship of instructional effectiveness on ELL learning outcomes. These factors include collaborative teacher teaming (Hunt, Soto, Maier, & Doering, 2003), teacher motivation, (Hoy, 2008), trust found in effective team organizations (Tschannen-Moran, 2001), and teacher familiarity with student sociocultural norms (Hill & Torres, 2010).

The first of the two-fold research question, how successful elementary school teams work together to ensure individual student success, leads to an exploration of teaming. An examination of DuFour’s professional learning community principles and elements may open the door to understanding how teachers can work together successfully.

The second of the two-fold research question, regarding teacher perceptions of motivation and barriers encountered as a team while trying to meet team goals and ensure Latino ELL academic learning needs, may be addressed by examining teacher trust and understanding of Latino cultural norms. A focus on the Latino student population is particularly interesting because of the current impact this cultural group has on education.

A growing body of research (Antróp-Gonzalez & DeJesus, 2006; Bernal & Domenech Rodriguez, 2009; Casas & Ryan, 2010; Gonzalez, Moll & Amanti, 2005; Gregg, Rugg, & Stoneman, 2011; Hill & Torres, 2010; Irizarry & Raible, 2011; Lian & Fontanez-Phelan, 2001; Rólon-Dow, 2005; Stillwell & Sable, 2013; Wayman, 2002) reports that the Latino ELL may present a challenge to teachers who are not familiar with the Latino culture. These researchers
further suggest that the traditional Latino view of separate domains, cultural and educational, may be foreign to many non-Latino teachers. The lens through which the Latino Each of these factors, collaborative teaming, trust in teaming and Latino cultural awareness is discussed in this review of research literature, as they relate to the central relationship between the non-Latino teacher’s instructional effectiveness and Latino ELL learning outcomes. Another purpose of this literature review is to reveal the mediating and/or moderating effect these factors have on this foundational relationship. Relationship factors include the following:

1. collaborative teaming in the elementary school and transformation for change;
2. trust in teaming and social exchange; and
3. non-Latino teacher sociocultural awareness and understanding Latino assumptions and expectations.

**Collaborative Teaming**

An elementary school team is a group of individuals who come together regularly to accomplish a common goal. A *collaborative* elementary school team is a group of individuals who meet regularly to share knowledge for the purpose of improving common targeted outcomes. Often an elementary school team is composed of individual teachers with responsibility for the same grade level. The teams to be studied in this proposed research inquiry are fourth-grade teams imbedded within a professional learning community (PLC). This organizational model is important to the proposed research because teams within a PLC are expected to be collaborative.

Recent research suggests that collaborative effort is key to successful team development. Conzemius and O’Neill (2014) opine that: “the vehicle for collaboration is the team” (p. 12). They propose that being skilled in collaboration can encourage development in synergetic
relationships, foster focus on common goals, and assist open discourse of transparent student data, all of which are factors of a successful collaborative team.

Skillful collaboration results in synergy: the effectiveness of a group exceeds what the individuals can accomplish on their own. Successful teams acknowledge people’s contributions—their leadership, commitment, knowledge and skills. Teams are more than just groups of people coming together to accomplish something. They serve a unique purpose, and when they are performing at high levels, they are generative—they create new knowledge, stimulate energy, and promote improvement in ways that individuals acting in isolation could not achieve (p. 20).

Literature on the subject of teaming maintains that teachers who venture into the formation of a high-functioning grade-level team may do so because they feel that they can monitor their own professional skill growth (Fleming & Monda-Amaya, 2001). Their skill growth can be measured by completion of professional development training and innovations that are accepted and implemented by grade-level team colleagues, as well as effective lesson presentation (Doolittle, Sudek, & Rattigan, 2008).

Webb, Vulliamy, Sarja, Hamalainen, and Poikonen (2009) note that the teachers who share in the expected collaborative responsibilities within the PLC are “transformed in terms of not just being responsible for delivering lessons in their class, but being able stakeholders in the development of [a] school” (p. 411). DuFour and Eaker (1998) believe that “teachers function as ‘transformational leaders’ who transform or change in a positive way their colleagues, students, and organizations. They expect their students to be successful” (p. 229).

Research shows that teaming has been found to be an efficient and effective method of instruction. Hunt, et al., (2003) believe that collaborative teaming serves special populations such
as ELL students with greater opportunities for academic growth. DuFour, DuFour, Lopez, and Muhammad (2006) agree with this opinion. When talking about advancing the PLC where teaming is embedded, they state,

The powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice. Teachers work in teams, engaging in an ongoing cycle of questions that promote deep team learning. This process in turn leads to higher levels of student achievement. (p. 9)

**Teacher Instructional Effectiveness: Seeing the ELL**

A growing body of research relates that teacher effectiveness has been reported to be positively and significantly linked to student academic outcomes (Ding & Sherman, 2006; Tucker, et al., 2005; Yeo, Ang, Chong, Huan, & Quek, 2008). Researchers note that teachers of high ELL populations are aware of their challenge to boost ELL academic outcomes to acceptable growth levels (Darling-Hammond, 2010; Echevarria, Vogt, & Short, 2008). According to Marzano and Kendall (1996) students from poverty and minority groups tend to begin school with one-half the middle-class vocabulary necessary for success in school. “Add to that the fact that eighty-five percent of any state's high-stakes test is based on vocabulary and you have a double whammy on the success of minority and poor children” (Tileston, 2011, p. 50).

Research on teacher effectiveness and student outcomes suggests that populating classrooms with highly effective teachers who are focused on each student’s success are related to positive results (Bryk, Harding & Greenberg, 2012). Sosa and Gomez (2012) make clear that
each student is an inclusive term of all minority groups and all levels of English speaking ability. Their request is that the ELLs are offered a seat in the classrooms of highly effective teachers.

Studies on teacher motivation show that positive intrinsic goal achievement tends to be lasting motivation and may be a predictor of effectiveness, which is positively linked with student academic outcomes (Hoy, 2008; Nitsche, Dickhauser, Fasching, & Dresel, 2010). Cameron and Pierce (2002) believe that intrinsic motivation intensifies interest and prolongs participation in an activity. They also note, “extrinsically motivated actions are said to be characterized by pressure and tension and to result in a loss of perceived competence and personal freedom” (p. 40). An implication from this review of literature is that teacher effectiveness seems to be affected by motivational factors. One assumption that may be drawn from these studies is that teachers who are motivated to adapt their practices to accommodate Latino ELL learning desire long lasting effects, which requires positive intrinsic motivation. Populating the classrooms of America with effective teachers, as researchers recommend, may benefit the not only the general population of students but the Latino ELL as well.

**Minority Culture Impact and Teacher Effectiveness**

Since this research is seeking to understand how non-Latino teachers meet the needs of their ELL students, a search of the impact of cultural differences on that relationship may be of interest. In his study on classroom cultural heterogeneity, Barry Fields (1999) discovered that the greater student diversity in a class, the more teacher instructional effectiveness could decline. According to Fields’ instructional effectiveness theory, the less a teacher is in touch with the minority culture within the school community, the less instructional effectiveness will exist in the classroom, and ultimately, the less opportunity will exist for student academic achievement as shown in Figure 2.
Figure 2. Negative student academic achievement is tied to teacher community valuation in Fields’s (1999) study.

An implication from Field’s research may be that the more a teacher is in touch with the minority culture within the school community, the more instructional effectiveness may exist in the classroom, and therefore more opportunity may be available for positive student academic achievement. Tomlinson (2001), in support of the teacher-school community connection, believes that when differences are celebrated and valued, a teacher can begin to be an effective instructor for all learners because the learning environment is inviting to every student. Research indicates that effective teachers ensure that their students are aware that they all compose a community of learners, and that teachers learn along with their students (Tileston, 2011). Wayman (2002) agrees and stresses that keeping an open mind and avoiding stereotyping Latino student–non-Latino teacher interaction is necessary for effective learning to take place.

The underrepresentation of most Latino students being taught by non-Latino teachers, as reported by the U.S. Census Bureau (2010), may be of interest to those who value instructional effectiveness for all students (Flynn, 2008) such as education administrators, classroom teachers (Finnigan & Daly, 2012), and stakeholders (Ortiz, 2004) in educational communities impacted by Latino immigration growth. Recent sociocultural research links non-dominant cultural training and teacher gender as factors in connecting with Latino students. Tileston (2011) believes that the fact that the majority of North American teachers are white females does make a difference in the classroom. In her work on culture, she points out that many white female teachers have not been trained to recognize and accommodate factors that affect learning by students in non-dominant cultures. Furthermore, these teachers are often distressed when students from other cultures do not pay attention or show hostility toward them.
The district in which the research sites of this proposed multiple-case study are located has a student population of approximately 73,000. According to enrollment statistics for the 2013–2014 school year there are 855 students within the district classified as Latino. Five percent of the total student body is categorized as Limited English Proficient (LEP). There are currently 360 LEP or ELL fourth-grade students in the research sites’ district, the majority of whom are taught by non-Latino teachers.

This proposed multiple-case research study is salient because the ELL students in the study sites are affected by non-Latino teachers. The cases consisting of four fourth-grade teams to be studied are predominantly staffed by white females with little formal training in interacting with non-dominant cultures (District Stakeholders Report, 2014). Apart from suggesting the obvious task of familiarizing themselves with traditional Latino cultural norms, a review of cultural literature advises that non-Latino teachers would do well to understand the significance of their Latino ELL students’ expectations of separate cultural and educational domains (Gregg, et al., 2011).

According to Angela Valenzuela (1999), the recent Latino immigrant student is accustomed to a genuine mutual relationship of caring between himself and his teachers. A decade of inquiry affirms Valenzuela’s assertion (Antróp-González & De Jesús, 2006; Flores-González, 2002; Irizarry & Raible 2011; Irvine, 2003; Ról-Dow, 2005). “Research with Latino students suggests that academic achievement is predicated on the development of caring relationships between students and their teachers, counselors, administrators, and other school agents, which allows for more positive experiences in schools” (Valenzuela, 1999, p. 188). Linda Darling-Hammond (1997) agrees that a caring relationship between teacher and student may affect the student’s school experience.
A positive human relationship between a student and teacher contributes to student learning because the student's desire to earn the respect and praise of a favorite teacher can be a powerful source of social motivation. Moreover, students who do not feel a direct human attachment with school personnel are more likely to have poor attendance and to drop out than individuals who perceive themselves to be part of a caring school community. (p.140)

The perception that educators who are non-Latino view Latino students as not fully engaged in education has been commented on for decades and continues to be a subject of recent research (Gándara & Contreras, 2011; Irizarry & Raible, 2011). The opinion promoted by these studies is that non-Latino teachers may connect successfully with Latino ELL students when they know what their students value culturally. Research on instructional effectiveness indicates that an educator’s school community involvement is a factor in reaching Latino students (Irizarry & Raible, 2011; Gándara & Contreras, 2011; Nieto, 2002).

Angela Valenzuela (1999) laments that the source of many misunderstandings between non-Latino teachers and their Latino students is simply their conflicting definition of social norms, such as caring. She further clarifies the crux of this social misperception; while the non-Latino teacher may believe Latino students do not care about school, the Latino student may judge their non-Latino teachers as not adequately concerned for them. Agreeing that this perception exists, Wayman (2002) cautions “teachers who lack familiarity with their students are more likely to misunderstand and fear them” (p. 35).

Literature suggests that the non-Latino teacher’s awareness of their Latino students’ social expectations may paint a clearer picture for them of what Latino students expect their student-teacher relationship to be like. Gonzalez, et al. (2005) believe that the place to begin to
understand cultural values is where they are taught—in the home. Reportedly, a benefit for the non-Latino teacher who is aware of Latino home values lies in “the array of cultural and intellectual resources available to students and teachers within those households” (p.71).

Gregg and colleagues (2011) suggest that understanding the significance of Latino cultural norms by non-Latino educators is critical to the success of the Latino child in school. They note that cultural values define the position of responsibility that Latino parents agree to shoulder within a school community. To the Latino parent there is a definite separation of home (cultural) and school (educational) domains as shown in Table A-1.

Table A-1

*The Traditional Latino View of Separate Domains of Educational Responsibility*

<table>
<thead>
<tr>
<th>Cultural Domain (Home)</th>
<th>Academic Domain (School)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach children morals</td>
<td>Enforce strict academic standards</td>
</tr>
<tr>
<td>Teach children to be responsible</td>
<td>Enforce strict dress codes</td>
</tr>
<tr>
<td>Teach children to be respectful</td>
<td>Enforce strict conduct expectations</td>
</tr>
<tr>
<td>Teach children to be well behaved</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The researcher’s synthesis of Hill & Torres’ (2010) domain separations.*

Hill and Torres (2010) disclose that the Latino parental conviction about their role in their child’s education influences the extent of social interchange between them and those who they feel are responsible for their child’s education, namely teachers and administrators. According to these researchers the traditional Latino view of the parental domain is to teach morals, responsibility, respect, and deportment at home. LeFevre and Shaw (2012) concur, “The Latino culture values collectivism, which includes valuing themselves through others, emphasizing family bonds, and preferring communal goals rather than individual goals” (p. 718)
The responsibility of educators through this traditional Latino lens is to take accountability only for academic standards, dress codes, and enforcing acceptable social conduct at school. This view differs from the non-Latino parental expectation, which embraces a partnership role with the school, viewing it as beneficial for the child, while the Latino view holds that such a partnership undermines parental authority and influence (Hill & Torres, 2010; Spera, Wentzel, & Matto, 2009). This cultural belief was supported by a 2005 national study on race, culture, and parental aspirations for the child’s academic outcomes. The Latino sample revealed that academic instruction alone was significantly and positively related to parental goals for their child’s academic outcomes, but not their responsibility, whereas other cultures understood their desires for their children’s academic success as a collaborative partnership between home and school (Davis-Kean 2005).

Sociocultural research endorses the thought that for the Latino student, learning is a social activity (Garcia, 2001; Nieto, 2002). As noted in ethnic research (Wayman, 2002), sensitivity to the Latino culture motivates educators who work with Latino children to create meaningful social relationships with them and their families (see Table A-1). He further shares that being familiar with the sociocultural background of their Latino ELL students better prepares non-Latino teachers to create a Latino friendly environment.

**The Professional Learning Community**

Since the subjects of interest to this proposed multiple-case study are teachers at schools where the organizational model is a professional learning community, the PLC is discussed herein. Richard DuFour (2004a) declares that the central goal of the PLC is to ensure learning success for every student.
According to DuFour and Eaker (1998) a PLC is a collaborative culture where teaming is an integral characteristic and commitment to students is valued (DuFour et al., 2006). DuFour and colleagues (2006) disclose six identifiable characteristics of a PLC. The ultimate goal for a true PLC is that every professional within the organization is committed to ensure the success of every student (DuFour, et al., 2006; Hord, 1997; Lee, Zang, & Yin, 2011).

Embedded in the high functioning PLC is the grade-level team, which shares the same foundational PLC principles (DuFour, 2004a). According to research spanning a period of 15 years, a true, positive collaborative culture is designated as one where best teaching practices are intended to lead to greater student academic outcomes (Webb et al., 2009; Hord, 1997; Doolittle et al., 2008). Richard DuFour (2004b) suggests the following possibilities for implementation of the six characteristics of a PLC in a grade level team.

A grade level team may demonstrate allegiance to the PLC element of shared mission, vision and values of a school PLC through their conversations. Conversations that once focused on teaching shift to a focus on student learning. Instead of asking, “How will we teach this?” The question becomes, “How will we know when the student learns this?” (DuFour, 2004a, p.10). Commonality in a grade-level team discloses whether or not there is commitment to shared mission, vision, and values. Schedules and valid formative assessments are made common and agreed upon in a team that values a shared mission. Accountability for improvement is shouldered by each individual team member as a show of loyalty to the mission, vision, and values of the whole organization.

Progress toward the PLC element of collective inquiry can be observed as the team engages in questioning. Three essential questions are a part of each collaborative meeting of a grade-level team that values the PLC. These essential questions are focused on student learning:
(a) What do we want each student to learn? (b) How will we know when each student has learned it? (c) How will we respond when a student experiences difficulty in learning? Through an ongoing exploration of this collective inquiry, coordinated strategies are developed to answer each question.

Grade-level teams in a PLC can show that they are indeed engaged in the PLC element of collaborative teaming by working together to promote deep team learning. They demonstrate their collaborative efforts through ongoing transparent analysis of classroom practices and making public their collaboration records.

Grade-level teams in a PLC can disclose their efforts toward the PLC element of continuous improvement through use of a PLC continuum rubric created by DuFour (DuFour, DuFour, & Eaker, 2008) shown in Table 2. To make transparent continuous improvement for students who are struggling, strategies designed to provide systematic and timely interventions may be tracked, analyzed, and reprocessed into the ongoing cycle of questioning.

The element of action research in a PLC may require experimentation on the part of grade-level teams. They may exhibit their commitment to action and experimentation orientation through differentiated mentoring and inventive common scheduling to ensure student learning.

The PLC element of results oriented involves the sharing of common data. Members of a PLC, such as grade-level teams, commit to being results oriented. An indicator of this pledge may be the act of embracing common data analysis or common criteria for quality of student work as markers of success.

DuFour et al., (2008) outline six elements by which PLC teams can be judged for effectiveness through stage descriptors. These six elements are (a) teachers working together in a collaborative culture, (b) administrator/teacher relations in a collaborative culture, (c) parent
partnerships, (d) action research, (e) continuous improvement, and (d) focus on results. Each of these six characteristics is evaluated on a continuum of four stages (see Table A-2). A view of the full rubric with descriptors is shown in Appendix B.

Table A-2

*The Basis of DuFour’s et al. (2006) The Professional Learning Community Continuum Rubric*

<table>
<thead>
<tr>
<th>Element</th>
<th>Pre-Initiation Stage</th>
<th>Initiation Stage</th>
<th>Developing Stage</th>
<th>Sustaining Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Culture: Teachers Working Together</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
<tr>
<td>Collaborative Culture: Administrator/Teacher Relations</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
<tr>
<td>Parent Partnerships</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
<tr>
<td>Action Research</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
<tr>
<td>Focus on Results</td>
<td>Pre-Initiation Stage descriptor</td>
<td>Initiation Stage descriptor</td>
<td>Developing Stage descriptor</td>
<td>Sustaining Stage descriptor</td>
</tr>
</tbody>
</table>

Hord (1997) notes that the PLC as an organization is a strong method of school reform and advancement. This concept is significant to this proposed study because, as classic literature on the PLC suggests, successful school reform may signal academic outcome improvement for the individual student. Stoll and Seashore Louis (2007) agree with Hord and identify the purpose of a PLC as that which is “essential for bringing about substantial and successful change in school policy and practice to improve pupil learning and attainment” (p. 405).

According to researchers, a successful PLC is a culture of transparent collaborative sharing that ensures learning for each student (DuFour & Eaker, 1998; Hord, 1997; Lee et al., 2011). Reportedly, team members in a PLC disclose common student scores to one another, make collective inquiry on how instructional improvements should be made, and hold one another accountable for common decisions (DuFour, 2004b). These collaborative practices can
leave team members feeling vulnerable if not founded on sure principles of trust (Clouder, 2009; Tschannen-Moran, 2001). Research on trust relates that teacher effectiveness is significantly and positively linked to trust in the principal, colleagues, and community members (Tschannen-Moran, 2001).

As noted previously by Bryk and colleagues (2012), teacher effectiveness may be the most important factor in student success. According to Tschannen-Moran (2001), collaborative sharing of pedagogy, individual proficiencies, and student insights may be the school’s most prized resource to enhance teacher effectiveness. She believes that this may be so because collaboration tends to produce the social capital essential for exemplary schools. She further points out, “Creating an atmosphere where collaboration can thrive includes the significant factor of building a climate of trust” (p. 308).

Research recognizes trust as a contributor of organizational effectiveness, necessary for open communication in an organization and a forum for organizational citizenship. Tschannen-Moran (2001) found that the more a principal collaborated with the faculty, the more likely trust was to be found between the principal and faculty members. She also found that, reciprocally, the proclivity of faculty members to perform beyond minimum job requirements has been associated with trust in their principal.

**Trust**

An examination of research on trust it points to the thought that an effective collaborative environment is reliant on a foundation of trust. Waltman, Bergom, Hollenshead, Miller and August (2012) regard trust as the means to ease resistance to change and to encourage action. Tschannen-Moran and Hoy (1997) suggest trust as key to a high-functioning grade-level team; trust is essential in facilitating members of the team to challenge each other’s opinions and
procedures. Webb and colleagues (2009) also note that trust aids a grade-level team in innovating and taking collective risks. Therefore it may be inferred from research on trust that teachers who value membership in a high-functioning grade-level team will make an effort to revisit their common team norms consistently to keep trust strong and balanced.

Tschannen-Moran (2001) notes that working in an environment where trust exists may foster higher regard for colleagues and allow for constructive exchange, open questioning, revitalized instruction, encouragement, and new ventures. She suggests that there is a reciprocal relationship between trust and team collaboration. “For teachers to break down norms of isolation and to sacrifice some of the autonomy they value so highly in order to reap the potential benefits of greater collaboration they must trust their colleagues” (p. 311).

One recognized definition of trust is that a person must be predictable, speak thoughtfully, never be a participant in deception, and follow through on promises (Tschannen-Moran, 2001). Some researchers of trust accept five basic attributes as a foundation of trust (Hoy & Tschannen-Moran, 1999; Janssen, Bakker, Bosman, Rosenberg, & Leseman, 2012; Tschannen-Moran, 2001). Illustrated in Figure A-3 are these five characteristics of trust: openness, benevolence, honesty, reliability, and competence.

Figure A-3. A commonly accepted view of the facets of trust based on Tschannen-Moran & Hoy’s (2003) model and Hallam and Hausman’s (2009) interpretation of the role of trust as a fulcrum in school reform.
Researchers emphasize that trust is an essential part of a successful organization (Saaverda, Smith & Reed-Tsochas, 2010; Tschanne-Moran & Hoy, 1997; Tschanne-Moran & Tschanne-Moran, 2011). Hallam and Hausman (2009) suggest that similar to the use of a pivot point on a fulcrum, the delicate balance of elements of trust is the “power used to get results” (p. 405). Tschanne-Moran (2001) reports that the expectation of a high-trust environment leads to a greater sense of efficacy among teachers. Her study further reveals other benefits from the existence of trust in a PLC, such as cooperation, constructive collaboration, and a support system.

Research shows that teachers in a PLC are situated in a results-oriented organization where improvement, commitment, and action are expected (DuFour et al., 2006). Tschanne-Moran and Hoy (1997) posit that trust has a direct influence on commitment. They believe that commitment comes from a feeling of belonging and prompts the desire to make a positive contribution to an organization. In agreement, Hallam and Hausman (2009) point out that trust is a commitment to and belief in the good faith of team members. Apparently for collaborative organizations such as high performing PLCs to enjoy clear communication, profitable teamwork and efficient communication, a foundation of trust is necessary (Tschanne-Moran & Hoy, 1997). Conversely, it may be inferred that where distrust reigns, commitment wanes and the realization of positive contributions from team members can be diminished. There is reported agreement even among detractors of PLCs that PLCs do foster trust, and that trust is a powerful tool in educational advancement and improvement (O’Keeffe, 2012).

**Collective Commitments to the Student**

Literature suggests that making collective commitments to the individual student is one approach teachers in a grade-level team within a PLC can employ to improve student
achievement outcomes. Lee and colleagues (2011) believe that making commitments as a collective team allows each teacher to feel responsibility for every individual student and whatever adapted learning is required. DuFour (2004b) underscores the importance of this type of collective responsibility.

When a school begins to function as a PLC, teachers become aware of the incongruity between their commitment to ensure learning for all students and their lack of coordinated strategy to respond when some students do not learn. The staff [then] designs strategies to ensure that struggling students receive additional time and support. (p. 8)

An account of collective commitment among several teachers that helped with the motivation of one ELL student is found in a book entitled *Hispanic Education in the United States: Raices y Alas*. Eugene Garcia (2001) recounts the following experience:

Why would she [his 10th grade Spanish teacher] not cooperate? Instead, she made it very clear that because I already knew most of what she would be teaching my classmates, her expectations, should I choose to remain in her course, were going to be much higher. "You have a gift," she said. "I had to work very hard to speak a language that I love but comes so natural and easy for you, a language you almost refuse to respect. I want you to use that gift." I had to have a C average, and she was not above flunking me if I did not meet her high standards. I later learned that she was in close communication with my basketball and baseball coaches and my geometry and English teachers, who went out of their way to remind me that I needed to stay academically eligible to continue my sports participation. It was a conspiracy that led for the first time to academic achievement and a feeling of academic worth. My study habits improved, my participation in class improved, and my grades improved. (p. 128)
García’s experience points out the power of reaching the *one* with specific collective commitments. In their analysis of trust, collective efficacy, and commitment in a PLC, Lee and colleagues (2011) reveal that teacher commitment to students is significantly and positively linked to trust in colleagues and collective efficacy. DuFour and colleagues (2006) additionally note that once specific promises are made, the child becomes an active part of the team and, according to DuFour, is assured learning (DuFour et al., 2006). Table A-3 shows a synthesis of DuFour’s et al. (2006) view of the transformation that takes place when commitments are made in the form of specific promises to the learner.

Table A-3

*The Transformation of Educator Commitments to the Individual Student with Specific Promises for the Purpose of Ensuring Learning*

<table>
<thead>
<tr>
<th>PLC Basic Commitments to Each Member of the PLC</th>
<th>Specific Promises to the Student, an Important Member of the Learning Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have a shared mission, vision, and values.</td>
<td>You will acquire the same knowledge and essential skills as any other child.</td>
</tr>
<tr>
<td>We engage in collective inquiry.</td>
<td>Your learning will be carefully monitored.</td>
</tr>
<tr>
<td>We are a collaborative team.</td>
<td>You will be a beneficiary of teachers who work collaboratively.</td>
</tr>
<tr>
<td>We work on the premise of continuous improvement.</td>
<td>Your teachers will clarify assignment standards in the quality of your work.</td>
</tr>
<tr>
<td>We are action and experimentation oriented.</td>
<td>You will promptly receive extra time when needed.</td>
</tr>
<tr>
<td>We are results oriented.</td>
<td>Your outcomes will guide your teacher to provide Effective lessons that will lead you to success.</td>
</tr>
</tbody>
</table>

*Note:* The researcher’s synthesis of PLC characteristics and firm commitments directed to the student as a member of a shared leadership team in a professional learning community taken from DuFour and colleagues (2006).

While the collective promises suggested by DuFour and colleagues (2006) made to each learner must be equal in importance, they cannot be the same. Linda Darling-Hammond (2004) addresses this predicament and states that despite national efforts to provide equal instruction, for minority students learning experiences continue to be unequal. She points out that disparities in
learning opportunities for minorities such as access to highly qualified teachers, a quality curriculum, equalized funding, and smaller class size continue to exist. Her research discloses that these disparities are strongly linked to differences in student achievement.

**Differentiated Instruction**

Differentiation has risen to prominence as one way to meet individual needs in diverse classrooms. While differentiation may not be the only way to accommodate individual student needs, it is a method of interest to the researcher that may lead to answers to the research query of how grade level teams organize and work together to ensure learning for Latino ELL students. The primary intent of differentiated instruction seems to be to maximize student potential for achieving quality outcomes. Literature suggests that teamwork is necessary for successful differentiation. According to Pearce, Conger, and Locke (2008), teaming significance is positively associated with the degree of mutual dependence among colleagues.

A growing body of research suggests that the more effective differentiated instruction, the greater will be the achievement and enhanced learning outcomes of the individual student (McTighe & Brown, 2005; Rock, Gregg, Ellis, & Gable, 2008). Discoveries being sought in this proposed research are indicators that a grade-level team is an appropriate environment for differentiated instruction and instruction adaptation to reach all students, including English-language learners.

Smith (2006) submits that instructional differentiation is an effective strategy to optimize learning for a struggling student such as the ELL. In agreement, Tomlinson (2001) suggests that teachers who differentiate instruction to support individual learning patterns value student diversity. In her work on motivation, Ruth Butler (2012) asserts that teachers may be motivated to differentiate in a team setting because of the possibility that differentiated instruction may
reach all learners and may satisfy the teacher’s intrinsic motivational need for goal achievement. Addressing instructional differentiation in a team setting means that teachers are willing to discuss the needs of individual students from the entire grade level, not just those assigned to an individual teacher on a class roll. A grade-level team in a PLC environment may determine how well they are reaching the needs of their students, including the Latino ELLs, by evaluating indicators of PLC characteristics. In review, PLC characteristics are:

1. Shared mission, vision, and values
2. Collective inquiry
3. Collaborative teams
4. Continuous improvement
5. Action and experimentation orientation
6. Results orientation

Indicators of these characteristics in a grade-level team are analysis of student scores, engagement in action research, and effective use of findings from action research to adjust instructional methods and strategies, and focus on student academic results (DuFour et al., 2006). Effective differentiated instructional methodology may be one approach to reach the goal of meeting individual needs in a diverse setting.

Differentiation could be misconstrued as synonymous with the term tracking. A common definition of tracking is stratifying students into ability groups. Differentiation, for the purposes of this proposed research, is defined as lowering the ceiling of a student’s zone of proximal development (ZPD; Vygotsky, 1978) and scaffolding instruction so that a student can successfully progress to a new zone of proximal development with a new ceiling goal (see Figure A-4).
Figure A-4. The researcher’s interpretation of a representation of the Vygotsky’s zone of proximal cognitive development (ZPD).

To visualize Vygotsky’s (1978) ZPD, this zone may be represented as a container with the individual inside. The bottom (floor) of the container represents the boundary of what is easily understood by the individual. The top (ceiling) of the container represents that which is too difficult for the individual to understand. With scaffolding or additional cognitive support, represented by a stairway in Figure 4, an individual may increase his or her cognitive ability through self-regulation.

Research reports that successful differentiated outcomes in high-functioning grade-level teams rely on common vision, common scheduling, and common grade-level curricula (Putnam & Borko, 2000; Stoll & Seashore Louis, 2007). Teachers who follow the foundational principles of a PLC value adherence to a common schedule of common lessons (Lujan & Day, 2009). According to research, successful differentiated instruction relies on the same common lesson being taught to each differentiated group (DuFour et al., 2006).

A body of research suggests that there is some apprehension that students stratified by race, class, and ethnicity will be hindered in academic and cultural growth. Studies show that tracking lower-achieving students with less-demanding curricula reduces learning opportunities
for struggling students (Anderson & Pavan, 1993; Dreeben, 1987; Oakes, 1985; Slavin, 1990). In support of this finding, further research shows that students who are stratified into tracked groups do not enjoy as great a level of academic success as their counterparts who are not tracked (Gamoran, 1990). Many educational researchers believe that tracking, as defined by homogenous stratification, is a detrimental method for reaching all learners. According to Darling-Hammond (1997), student learning outcomes improve across the board in schools where tracking is seldom used.

In light of the foregoing findings by highly regarded researchers, why would a learning organization consider differentiation as one way to reach learners? The answer may lie in a combination of the following factors: (a) the foundational definition of differentiation vs. tracking, (b) the common collaborative factor found in a properly organized PLC, (c) collegial trust, and (d) the individual student’s innate abilities; self-regulation, the mastery of one’s thinking (Vygotsky, 1978).

Bandura (1977, 2003) has interpreted Vygotsky’s (1978) term, ZPD or self-regulation to mean cognitive scaffolding or socially supportive experiences. According to Bandura’s social learning theory, scaffolding takes place when others in the individual’s social environment, who are more competent, provide support for the individual to reach the ceiling of the ZPD through social interaction such as modeling. With the ceiling of a ZPD lowered, effective support, and sufficient scaffolding for each student in place, an ELL student may be more likely to achieve increased academic growth than in an environment where across-grade-level differentiation exists.
**Barriers**

Barriers to reaching the desired goal of improved ELL learning outcomes are likely to exist. Anticipated responses from the subjects in this proposed multiple case study may address barriers to successful teaming, organizing, collaboration, and ensuring learning for each student. Conzemius and O’Neill (2014) identify two fundamental barriers that may challenge teachers who attempt to organize themselves into productive collaborative teams.

These two types of barriers are institutional and social. Institutional barriers include the individual operating system, a fragmented school day, inflexible contract conditions, lack of time, policies that reinforce individual approaches as opposed to a team approach, unclear team goals, and physical space limitations. Social barriers include preconceived negative assumptions, limited skills, poorly defined team roles, value of individual recognition over team recognition, celebration of individual accomplishment, lack of trust, unsupported teamwork, and sporadic teamwork (Conzemius & O’Neill, 2014).

Institutional barriers can present a challenge to the grade-level team seeking to ensure learning for the ELL. One study found that the process of teaming was viewed to be more crucial to teaming success than were actual group interactions. Clarity of membership roles was linked in a high degree to team effectiveness and solidarity (Fleming & Monda-Amaya, 2001). Hunt and colleagues (2003) found that provision of an open forum for dialogue concerning performance monitoring and individual accountability was positively linked to level of teaming success. DuFour (2004b) noted that whole-school schedule designs of flexible time and adaptable support were factors in individual student learning.

Social barriers such as lack of time, a toxic school culture, lack of strong leadership, fear of reform, or lack of clear organizational vision can bring a fledgling PLC to its knees (Doolittle
et al., 2008; Putnam & Borko, 2000) and with it the organization of the grade level team. Recent research points out that situating the organization of a PLC in a school and achieving a high-functioning PLC culture, through espousing PLC behaviors, are two very different things. Weldon (2011) suggests that teachers who are resistant to support PLC principles do so because of reasons ranging from distrust, to confusion, to ambiguity. Lujan and Day (2009) agree and further note that actions to show displeasure range from non-support and neglect to defiance, resistance, insubordination, and sabotage.

Researchers note that working together as a collaborative team and maintaining motivation is hard work (Darling-Hammond, 1997; Fleming & Monda-Amaya, 2001). Stoll and Seashore Louis (2007) believe that collaborative teaming requires not only a common vision, sharing, collegiality, and collective effort but also trust to overcome barriers to success.

**Conclusion**

In conclusion, and as a synthesis of the body of literature reviewed, this proposed multiple-case study begins with the awareness of research literature regarding effective instructional strategies, successful teaming practices, and attention to cultural differences which inspire teachers to meet their ELLs needs. Because of recent reports (District Stakeholders Report, 2014; U.S. Census Bureau, 2010) that indicate that the majority of teachers in the proposed research sites are non-Latino, and the sites appear to be impacted by Latino ELLs, teacher actions directed at meeting all of their students’ academic needs, including Latino ELLs, is of interest to this researcher. The two-fold question of interest for this proposed multiple-case research study is:

1. In grade-level teams with all non-Latino teachers, in four elementary schools within the same district with similar demographic makeup that includes a
significant ELL population, how does a team organize, work together and
discourse about their work in an effort to achieve instructional effectiveness?

2. What are team members’ perceptions of their work together while trying to meet
team goals and ensure learning for all students, which necessarily includes a
significant Latino ELL population?

The corpus of literature reviewed for this proposed study reveals concepts salient to this
research. Significant concepts that have emerged are:

1. identification of and motivation to overcome barriers to successful teaming
   (Fleming & Monda-Amaya, 2001; DuFour & Eaker, 1998),
2. the role of trust in teaming (Saaverda, Smith & Reed-Tsochas, 2010),
3. effective instructional strategies of non-Latino teachers’ as they interact with
   Latino ELL students (Fields, 1999), and
4. social benefits of promoting ELL academic growth (Darling-Hammond, 2010).
In order to examine strategies of successful non-Latino teachers who interact with a significantly Latino–ELL-impacted environment, four schools with similar demographics were selected as study cases. This study addresses the following research questions:

1. What PLC elements do teams use to achieve instructional effectiveness?
2. How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?

The following sections provide a detailed description of research design, the sample, data collection, and data analysis for this study.

**Research Design**

As a multiple-case research study, qualitative data were gleaned from the inside perspective of interviewees through team collaboration meeting observations and face-to-face interviews. In order to begin the process of answering the research questions, anecdotal notes were taken at each research site during the collaboration meeting for the purpose of ascertaining team interaction and topics of discussion.

To discover answers from the participants that were aligned to the research questions, face-to-face interviews were conducted with each of ten participants. Interview questions surfaced during perusal of the literature review. These interviews were approximately 30 minutes in length. The purpose of these interviews was for the participants to answer open-ended key questions related to the central questions of this study. Constructs fundamental to this research, such as teaming in a PLC, the existence of trust in teams, and expectations of ELL students by their teachers provided data for the research.
Sample

In order to follow the research design of a matched multiple-case study, the sample for this research was purposeful. The researcher’s desire was for the demographics of these sites to be comparable with several matching characteristics. Research site schools were chosen for their demographic similarities. Their ELL population was similar, the minority population was largely Latino in each case, and all schools had Title I status; all were situated within the same city and in the same school district. A fourth-grade sample was purposefully chosen because of its stereotypical *slump year* status (Sanacore & Palumbo, 2009; Stockard & Englemenn, 2010), the National Assessment of Educational Progress (NAEP) report card focus and also because of past personal experience of the researcher.

As Corbin and Strauss (2008) note, purposive sampling gives the researcher an opportunity for field-based powerful descriptions by those who are actually working within the confines set by the researcher. Therefore, the researcher’s desire was for qualitative research to clarify and lend a concrete voice to what was initially a conceptual belief based on a review of literature. Observation was found to be valuable during the quest for factors that inspire non-Latino teachers to interact favorably with their ELLs who are Latino, thereby offering this specific minority group an opportunity to achieve academic success.

Data Collection

In order to collect authentic qualitative data, settings for this research study took place at each of the four selected school sites. Initial observation was carried out in common rooms such as the classroom, the faculty room and/or media center. Face-to-face interviews were held in the classroom of each individual teacher. Artifacts gathered at the time of collaboration observation
were used to ascertain team interaction and adherence to the prescribed organizational model. These artifacts were in the form of team agendas, teacher notes, and instructional plans.

So as to keep communication timely with the participants of this study, email contact was made with each individual teacher on the team observed in the week following collaboration observation. The email consisted of an expression of thanks for allowing the researcher to sit in on team collaboration and also to request a date and time for a face-to-face individual interview.

Once a date and time for the individual interview was confirmed via email, the researcher met privately with the participant to conduct an interview consisting of the following questions:

1. What instructional strategies are used to meet the needs of English-language learners for whom this team has responsibility? Why?

2. As measured by the DuFour et al. (2006) rubric, what does an effective team look like?

3. How does trust impact this team organization? On a scale of 1–5, 5 being totally trustworthy, how would you rate this team on being trustworthy? What facets of trust are present on this team?

4. What steps are taken to understand the Latino culture, their expectations of educators and their own parenting responsibilities?

In order to gather valid, reliable research data that aligned with the research questions, two instruments were used during face-to-face interviews. One was employed to measure team adherence to district PLC principles. This instrument was based on DuFour, et al. (2006) professional learning community. The other was a trust index used to measure perceived trust of team members for their team based on Tschannen-Moran and Hoy’s (2003) Faculty Trust survey.
In order to satisfy the question of qualitative research quality, triangulation was carried out in the form of member checks. Validity and reliability checks were addressed through a research log and memos kept during analysis (Flick, 2007; Gibbs, 2007; Miles & Huberman, 1994).

So as to assure that the orientation of the research questions was aligned to the study, a check of question appropriateness was performed after the first set of interviews was completed. This check was achieved by collaborating with research committee members who are accomplished researchers with an extensive background in qualitative research. Once question appropriateness was checked satisfactorily, tests of research quality resumed.

To satisfy validity and reliability, interview recordings were transcribed and returned to the participant in e-mail format for approval as a member check. Once approval was given to the researcher, validity tests in the form of triangulation and the constant comparative method were pursued. This act of member checking served as triangulation to ensure reliability of this qualitative research and reduced the possibility of research bias. Because a lone researcher performed this study, a consistent record in the form of a research log aided proof of reliability.

Procedure

In order to satisfy university and school district research requirements, the university IRB and district research office approved recruitment letters, which were then delivered to site administrators via mail. Recruitment letters sent to administrators at each of the four proposed research sites requested permission of the administrator to conduct research at his or her school. To satisfy timely communication, a follow-up telephone call was placed within three days of receipt of the posted letters. The purpose of the telephone contact was to make an appointment to
meet with the site administrator to receive approval to conduct research at his or her school and to set a time and day for the first observational visit.

Primarily, data for this qualitative study were gathered from common collaboration meetings in the form of researcher notes and artifacts such as team agendas. The researcher observed these meetings with a focus on team interaction, adherence to district approved PLC principles, and discussion surrounding student data. Notes were taken during these meetings and kept in separate color-coded files corresponding with the research site. At this collaboration meeting a “Consent to be a Research Subject” form was given to each teacher for his/her perusal until a face-to-face interview was held. A proposed date and time for individual face-to-face meetings was set at this time. These collaboration observations spanned five weeks.

In order to present the Consent to be a Research Subject form and receive each administrator’s signature on the form, a face-to-face visit was requested. Each principal replied with a return email confirming a date for a face-to-face conversation and the proposed date for the collaboration observational visit. At the time of the personal visit, approved copies of letters of introduction and an explanation of the proposed qualitative research were left with the administrator for the purpose of distribution to the proposed participants.

Face-to-face settings, spanning a period of four months, were held in the individual teacher’s classroom. One participant requested to not participate in this part of the research. This request was, of course, honored. At these individual interviews the “Consent to be a Research Subject” forms were checked for signatures and content understanding and gathered and filed in accordance with the corresponding school site. These interviews were audio recorded for accuracy, a reliability check to ensure validity and to reduce researcher bias. The DuFour et al. (2006) PLC rubric and Hoy and Tschannen-Moran’s (1999) trust survey were presented during
the recorded face-to-face interview. Each participant marked a Likert scale continuum 1–5, 1 being low and 5 being high on each instrument. Participants discussed their feelings about each of the components being studied regarding their team while marking both instruments.

Data Analysis

To make the qualitative data gathered from the research participants purposeful, data analysis was carried out through a coding process. Using the qualitative research software program, NVivo 11 (QSR International Pty Ltd., 2011), the first step of analysis was to import or upload results of the surveys and the entirety of the interviews to prepare the data for open coding. The first step in the coding process is open coding. Open coding, the act of collecting initial raw data in a series of holding cells (nodes), continued as each new respondent’s replies were compared back to the initial data repeatedly through the constant comparison method. Nodes continued to shift and change during this step of analysis until a point of saturation was reached.

In order to assure validity of research data, constant comparison began with the first teacher interview and the within-interview comparison. After the first teacher interview was complete, an internal comparison of the content of the interview was made to determine consistency, establish understanding of the central message, and create initial coding categories.

To proceed with the constant comparison process between interviews comparison, data from the same site were collected for comparison. When the second teacher interview was complete, the same internal comparison process again ensued and the between-interviews comparison process continued. Comparison of similarities and differences within and between each new interview at the same site expanded code labels, as well as enriched descriptions.
Between-interview comparisons at different sites triangulated data sources, augmented information gathered, and exposed fresh data. To gain insight and to compare and contrast new information to existing data, the process of constant comparison continued. This cycle of within interview comparison, between interviews comparison, within site interviews comparison and between site interviews comparison was repeated again and again as new information unfolded.

At the point of saturation, when there was nothing left to look for in a particular category, a perusal of data clustering and relationships moved the process to axial coding. Axial coding that revealed repeated patterns, and eventually produced themes, was the natural next step in qualitative analysis. Themes were then checked for across-case comparisons. During axial coding, analysis of necessity broadened to take relationships into account.

Selective coding, or analytic narrowing, followed axial coding. From this act of simplification, themes emerged, which were compared to the core research question for confirmation (Boeije, 2012; Strauss & Corbin, 1998). Through use of several descriptive NVivo (QSR International Pty Ltd., 2011) data Core research questions and study of the literature review as well as the DuFour, et al., (2006) PLC elements and Hoy and Tschannen-Moran’s (1999) trust elements aided in theme narrowing. Three obvious pattern clusters: instructional strategies, collegial trust, and approaching instructional strategies through cultural understanding pointed a direction toward possible answers to the initial core research questions.

1. What PLC elements do teams use to achieve instructional effectiveness?

2. How does trust impact the work of the PLC team as they work together for all students, including their Latino ELL students?

Analyses of the two survey responses were based on a Likert scale ranging from 1 to 5.
2006) found in Appendix C, measured each of four PLC elements for agreement of use on the team. Each element was rated as 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (agree), and 5 (strongly agree). The second survey based on Tschannen-Moran and Hoy’s (2003) Faculty Trust survey also used a Likert scale to determine degree of evidence. Each of five trust elements was rated using a scale from 1 to 5. A score of 1 signified highly untrustworthy, 2, untrustworthy, 3 neutral, 4 trustworthy, while a score of 5 indicated highly trustworthy (see Appendix C).

**Conclusion**

In summary, an investigation of strategies of successful non-Latino teachers who are instructors in a significantly Latino ELL impacted environment was carried out over a period of four months. In order to answer the research questions, qualitative data were gathered from observation of team collaboration meetings and individual face-to-face interviews. Two instruments were used in this study. The research design of team observation, face-to-face interviews and use of two survey instruments was designed to align with the core research questions.

In order to satisfy research quality, reliability tests were attended to through triangulation, member checks, and a comprehensive research log. Validity was satisfied through triangulation. Researcher bias was reduced through the use of hard copies of interview transcripts for member checks.

Analysis of individual interviews and survey results were aided by the use of NVivo 11 (QSR International Pty Ltd., 2011), a qualititative software analysis program. Analysis consisted of (a) open coding, collecting raw data; (b) axial coding, the discovery of patterns, themes, and
relationships in the collected data; and (c) selective coding, the application of research question comparisons against emerging themes and relationships.
APPENDIX C

Assessment Instruments

The PLC Teaming Rubric

*Directions:* As you consider the Latino ELL population of your grade level, please indicate the extent of your agreement or disagreement with each of the following statements by marking the columns on the right. Degree of agreement ranges from (1) Strongly Disagree to (5) Strongly Agree.

<table>
<thead>
<tr>
<th>PLC Element</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborative Culture:</td>
<td>Teachers on our grade level team work collaboratively to identify goals,</td>
</tr>
<tr>
<td>Teachers Working Together</td>
<td>develop strategies to achieve those goals and gather relevant data, and</td>
</tr>
<tr>
<td></td>
<td>learn from one another.</td>
</tr>
<tr>
<td>Action Research</td>
<td>Topics for action research in our grade level collaboration arise from the</td>
</tr>
<tr>
<td></td>
<td>shared vision and goals of our school.</td>
</tr>
<tr>
<td>Continuous Improvement</td>
<td>Teachers on our grade level team participate in an ongoing cycle of data</td>
</tr>
<tr>
<td></td>
<td>analysis to identify discrepancies between actual and desired results.</td>
</tr>
<tr>
<td>Focus on Results</td>
<td>Teachers on our grade level team gather relevant data to identify</td>
</tr>
<tr>
<td></td>
<td>improvement goals and to monitor progress.</td>
</tr>
</tbody>
</table>
Trust Survey

*Directions:* As you consider your work with your Latino ELL students, please indicate the extent of your personal feelings about the extent that each element of trust exists on your grade level team. Degree of trustworthiness ranges from (1) Highly Untrustworthy to (5) Highly Trustworthy.

<table>
<thead>
<tr>
<th>Element</th>
<th>1 Highly Untrustworthy</th>
<th>2 Untrustworthy</th>
<th>3 Neutral</th>
<th>4 Trustworthy</th>
<th>5 Highly trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honesty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benevolence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This instrument is based on Tschannen-Moran and Hoy’s (2003) *Faculty Trust Survey*
APPENDIX D

Consent Form

Consent to be a Research Subject

Introduction
This research study is being conducted by Charlene Farnworth, M. Ed., at Brigham Young University to determine the effectiveness of fourth grade teacher teaming on Latino English language learners' academic outcomes. Professor Scott E. Ferrin, Brigham Young University, School of Education, Department of Educational Leadership and Foundations is Chair of this research. You were invited to participate because you teach fourth grade at a school that is impacted by a significant Latino English language learner (ELL) population.

Procedures
If you agree to participate in this research study, the following will occur:

- your team will be observed during Monday collaboration on at least one occasion at your team collaboration meeting site.
- you will be interviewed for approximately thirty (30) minutes about trust in teaming and effectiveness as a teaching team within a professional learning community (PLC) impacted by Latino English language learners (ELL).
- your interview will be audio recorded to ensure accuracy in reporting your statements.
- you will be given the opportunity to approve a transcript of your interview as accurately representing your views.
- the interview will take place at a time and location convenient for you.
- the researcher may contact you later to clarify your interview answers for approximately fifteen (15) minutes.
- total individual time commitment will be 45 minutes.

Risks/Discomforts
Risks of the study may include the feeling of emotional discomfort when asked to divulge views of yours and colleagues' degree of trust and perceptions of teaming effectively. There will be no loss of classroom time.

The researcher will minimize emotional discomfort by keeping all conversation content confidential. The researcher will at no time divulge interview content to anyone.

Benefits
There will be no direct benefits to you. It is hoped, however, that through your participation the researcher may learn about effective teacher teaming within a PLC and how team practices, strategies and school community involvement impact fourth grade ELL academic outcomes.

Confidentiality
To ensure confidentiality, all research data will be kept in a secure, locked safe. Only the researcher will have access to the data. Data, including audio recordings of all interviews will be kept in a locked, fireproof safe, in a secure location to which the researcher alone has access. To further assure anonymity, all participants will be referred to by code, using password protected and encrypted identifiers. At no time will identity, location or names be divulged. At the conclusion of the study all identifying information will be removed.

Compensation
You will not receive compensation for participating in this study, with the exception of a small token of gratitude from the researcher.

Participation
Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate entirely without affecting your employment or standing at your school.

Institutional Review Board

Byu

9-20-2017 7-8-2018
Approved Expires
Questions about the Research
If you have any questions regarding this study, you may contact Charlene Farnworth at 801-310-7023 or cfarnworth@alaineschooldistrict.org for further information. You may also contact BYU Chair, Scott Ferrin, J.D., EdD, Brigham Young University School of Education, Department of Educational Leadership and Foundations 801-422-3600. Email: Scott_Ferrin@byu.edu

Questions about Your Rights as Research Participants
If you have any questions regarding your rights as a research participant contact Sandee Muñoz at the IRB office, (801) 422-1461; A-285 ASB, Brigham Young University, Provo, UT 84602; irb@byu.edu.

Statement of Consent
I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Name (printed) ___________________________ Signature _______________________ Date: __________

Institutional Review Board
BYU
6-29-2017 7-9-2018
Approved Expires
DISSECTATION REFERENCES


*Curriculum Perspectives, 19*(3), 41-51.


*Remedial and Special Education, 22*(3), 158-171.


MyOn® (2015). Personalized literacy software; MyOn LLC.


NVivo (2011). Qualitative data analysis software; QSR International Pty Ltd.


O'Keeffe, J. (2012). In praise of isolation: Who says PLCs are a better way? *Phi Delta Kappan, 93*(7), 8-12.


