

Leading Turnaround Instructional Improvement for Dual Language Learners: Designing an Immersive Professional Learning Program to Invigorate Secondary Teachers' Multilingual, Interdisciplinary Planning and Teaching Practices through Focusing on Emergent Bilingual Students' Biliteracy Writing Skills Development

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Abstract

Addressing the academic performance deficiencies associated with the growing percentages of immigrant/emergent bilingual learners and other culturally and linguistically diverse sub-groups comprising the student populations of many K-12 school districts in the United States continues to be an acute challenge facing school change agent leaders. This article profiles how one high school principal and his instructional improvement colleagues working in a high-diversity metropolitan school district in the southwestern US utilized design-based improvement research methodologies (i.e., multileveled data analysis processes coupled with targeted intervention program development techniques) widely supported in the education improvement science literature to drive turnaround instructional improvement for emergent bilingual learners on their campus. The multi-week intervention program developed and implemented by the principal and his intervention team included carefully structured immersive learning experiences to assist grade-level teams of teachers in gaining multilingualism literature-informed knowledge and skills on how to effectively integrate writing development-intensive dual language learning projects into their instructional planning efforts and classroom teaching practices to significantly expand and deepen biliteracy-centered interdisciplinary learning for the campus's large populations of emergent bilingual and other culturally and linguistically diverse students. The article includes a discussion of how campus-based instructional leaders can leverage school-wide root causal data analysis techniques in tandem with design-based interventionist methods that incorporate the intentional use of writing development-intensive dual language project learning strategies as powerful turnaround instructional improvement tools for expanding and enhancing the biliteracy, interdisciplinary academic development of multilingual learners in high-diversity school districts.

Key Words: educational design research; high-diversity school districts; dual language writing development; biliteracy instructional teaming

Introduction

Effectively addressing the academic performance gaps between native English-speaking and English as a second language (ESL) students resulting from the increasingly large percentages of immigrant/emergent bilingual learners and other culturally and linguistically diverse sub-groups comprising the student populations of many K-12 school districts in the United States continues to be a pressing challenge for instructional improvement leaders working in elementary and secondary school settings.

States in the southwestern portion of the United States in particular—including border states such as Texas, New Mexico, Arizona, and California—have experienced dramatic surges in Hispanic student enrollments over the past decades as a result of the increasingly large numbers of Hispanic families who have immigrated to the United States from Mexico and other Central American countries such as El Salvador, Honduras, and Belize. These Hispanic families have largely been drawn to the southwestern United States to pursue the variety of employment opportunities that have become available in large metropolitan urban centers and their surrounding satellite communities as a result of continuing economic expansion in the region's industrial, agricultural, and human services sectors.

This influx of Mexican and Central American workers and their families with school-age children—many of whom speak Spanish as their sole native home language—has placed considerable pressure on school district leaders in the United States to redesign their curricular programs and overhaul their staff development/professional training efforts to provide teachers with the specific kinds of dual language–anchored instructional planning strategies and teaching support tools they need to be able to properly serve the unique bilingual learning support needs of the *emergent bilingual* (i.e., native Spanish–speaking, learning English as a second language) students entering their classrooms. In Texas, for example—a border state with a large geographical footprint and multiple metropolitan urban centers—emergent bilingual students have always been a significant part of this border state's overall elementary and secondary student populations. However, realizing positive learning performance outcomes for these large populations of emergent bilingual learners is an ongoing challenge. As of August 2025, just over 5.5 million students are enrolled in Texas public schools. Twenty four percent of the overall population of Texas public school students are English Language Learners (ELLs) and are thus classified as Emergent Bilingual (EB) students. Indeed, Texas alone serves one in four of the nation's EB students. Moreover, over eighty five percent of the students enrolled in Texas public schools as of the 2024–2025 school year speak Spanish at home. (Texas Education Agency, November 2025) In the state of Texas, dual language immersion programs have consistently been shown to produce better educational outcomes for emergent bilingual students compared to Transitional Bilingual (TB) Programs or English as a Second Language (ESL) Programs. Despite this, however, only twenty one percent of the nearly 1.3 million emergent bilingual students in Texas were participating in genuine dual language–learning programs during the 2023–24 school year. This low rate of EB student participation in dual language–learning programs in recent academic years in Texas is due primarily to the longstanding shortage of certified pre-kindergarten through twelfth-grade bilingual teachers actively working in Texas public school districts. (Texas Education Agency, November 2025) This dire situation has increased the pressure on instructional improvement leaders serving as administrators in schools and school districts across Texas to both: 1) monitor the less than adequate bilingual and dual language programs currently existing in their districts; and 2) work to find creative ways to tap into their increasingly limited fiscal resources to provide cutting-edge, literature-supported bilingual academic development knowledge and biliteracy educational materials to assist grade-level teams of teachers in learning how to actively incorporate *dual language–anchored learning strategies* into their instructional planning efforts and classroom teaching practices.

There is general agreement among researchers in the biliteracy/multilingualism literature regarding a number of evidence-based, effective instructional strategies that teachers in elementary and secondary settings can employ to actively support the dual language academic learning development of emergent bilingual students. These empirically supported instructional strategies include: 1) scaffolding comprehension and production of language (e.g., Gibbons, 2015); 2) reinforcing academic language across the curriculum (e.g., Zwiers, 2008); 3) engaging students' multilingual repertoires (e.g., Little & Kirwin, 2019); 4) maximizing literacy engagement (e.g., Guthrie, 2004); 5) connecting with students' lives and the knowledge, culture, and languages of their communities (e.g., Moll et al., 1992); and 6) affirming students' identities by enabling them to use their language and literacy skills to carry out powerful high-engagement intellectual and creative academic work (e.g., Cummins & Early, 2011). When emergent bilingual students reach the secondary school level (i.e., middle school and high school grades)—after students have presumably begun to acquire some basic, foundation-level understandings of academic content in both their native home language and their second acquisition language—multiple researchers have demonstrated the efficacy of teachers immersing their emergent bilingual students (for example, students whose native home language is Spanish who are learning English as their second academic language) along with their native English–speaking peers in *writing development–intensive learning projects* to expand students' opportunities for collaborative, peer-interactive dual language academic learning. These writing development–intensive learning projects can serve as powerful means to incentivize both emergent bilingual students and their native English–speaking peers to actively engage together in designing and developing creative, community-centered investigative research and publishing projects that can significantly advance students' academic and social biliteracy skills.

The kinds of writing development–intensive dual language learning projects that teachers can create for their emergent bilingual students are virtually unlimited. For example, high school teachers can design dual language project work in which emergent bilingual students and their native English–speaking peers can work together to write and web-publish dual language books or web-publish curriculum-related project work using digital programs such as Powerpoint. Students can also collaborate together to create dual language project videos using iPads and similar technologies (e.g., see Cohen, 2011; Cohen & Leoni, 2012; Giampapa, 2010; Giampapa & Sandhu, 2011). Additionally, emergent bilingual learners along with their native English–speaking peers can work together to express their ideas and insights through poetry as well as other writing genres using both their native home language and second acquisition language. Students could initially write their poetry or other kind of genre writing using either their home language or their second acquisition language (depending on their comfort level with each language) and then work with their peers to translate their genre writing from one language to the other. Notably, this kind of immersion in peer-interactive, cross-linguistic translation provides powerful opportunities for students to deepen their awareness of language and understanding of written texts at the lexical, syntactic, and semantic levels (Jimenez et al., 2015). To expand the extent of peer-to-peer collaboration, teachers could work with their students to design peer-interactive learning projects in which students collaborate with partner classes in distant locations (e.g., with students enrolled in schools in other cities or countries) to develop and implement a variety of creative projects involving dual or multiple languages. These projects could focus on various kinds of current community-based resource utilization and social awareness issues, such as: climate change, water conservation, environmental policies, income disparities, as well as other kinds of curriculum-related content (e.g., Cummins, 2007; Skourtou et al., 2006). Importantly, encouraging students to become actively involved in these kinds of “dual language writing development–intensive” immersive learning projects provides multiple opportunities for students to utilize the full range of their intellectual and linguistic talents in developing and implementing their collaboratively designed creative learning project tasks. The few writing development–intensive project-based examples highlighted here illustrate the range of dual language, peer-interactive learning projects that teachers and students can design together to substantively expand and enhance secondary students’ biliteracy academic content and social learning development skills.

Multilingualism researchers have collected substantial empirical evidence supporting how these kinds of writing development–intensive, immersive learning project activities designed and implemented in secondary classrooms can be demonstrably effective in supporting emergent bilingual students’ authentic biliteracy academic learning development (see Cummins, 2021). School improvement leaders working in high-diversity school districts who are tasked with turning around persistent academic learning performance gaps involving their emergent bilingual student populations could consider incorporating knowledge and skills training on the use of writing development–intensive, dual language project-based learning strategies into their district’s educator professional development (PD) programs as an intentional means to substantively expand classroom teachers’ instructional planning toolkits on how to effectively address the unique academic learning development support needs of their emergent bilingual and other culturally and linguistically diverse students.

Purpose

The purpose of this article is to showcase how school leaders working in high-diversity metropolitan school districts who are struggling to address the persistent low academic performance of large populations of immigrant/emergent bilingual students can leverage the power of *design-based school improvement methodologies* in combination with *investigative data teaming* and the systematic integration of *dual language writing development strategies* into teachers’ professional development (PD) intervention programming to directly address the unique academic development and instructional support needs of their district’s diverse learners (i.e., immigrant/emergent bilingual students and other culturally and linguistically diverse student sub-populations). The metropolitan high school case study profiled in this article describes how one high school principal and his instructional improvement team colleagues under pressure to deal with the substantive academic learning gap challenges affecting their campus’s large population of emergent bilingual students utilized design-based school improvement analytic thinking and intervention program development strategies to enact targeted “turnaround instructional improvement” on their campus.

The principal and his team designed and implemented a multi-week professional development (PD) intervention program on the campus that provided grade-level teams of teachers across ninth through twelfth grades (with each grade-level team consisting of groups of core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers) with carefully structured immersive learning opportunities to gain multilingualism research literature–informed knowledge and skills on how to effectively *integrate writing development–intensive dual language learning projects* into their instructional planning efforts and classroom teaching practices to significantly expand and deepen students’ biliteracy-centered interdisciplinary learning. A detailed description of the schoolwide data analysis procedures, multiple literature review activities, and “instructional improvement intervention program” design and development efforts completed by the principal and his team along with a discussion of the results and findings emerging from the intervention program’s implementation are presented in the various sections of the case study report below.

Research Methods

The author (working as an instructional improvement consultant in the metropolitan high school profiled in the case study below) guided campus-based school leaders in utilizing *design-based school improvement research methodologies* (i.e., multileveled data analysis processes coupled with targeted intervention program development and implementation techniques) described in the education improvement science literature (McKenney & Reeves, 2012; Mintrop, 2016; Plomp, 2010; Plomp & Nieveen, 2010; van den Akker, 1999; van den Akker et al., 1999; van den Akker et al., 2006a, 2006b) to drive turnaround instructional improvement for emergent bilingual learners on their campus. A key design feature of the particular educator professional development (PD) intervention program developed and implemented in the high school setting described in the case study highlighted in this article report involved the incorporation of a carefully structured series of “new content knowledge acquisition” and follow-up “hands-on, immersive learning experiences” into the overall PD program. These collective new knowledge acquisition and immersive learning experiences focused on assisting grade-level teams of teachers in learning how to actively integrate *writing development–intensive dual language learning projects* (Cummins, 2021; Cummins & Early, 2011; Little & Kirwin, 2019) into their instructional team planning and classroom teaching practices as an intentional means to substantively expand biliteracy-centered interdisciplinary learning opportunities for the campus’s large populations of emergent bilingual and other culturally and linguistically diverse students. The specific steps involved in this *design-based approach* to enacting turnaround instructional improvement to effectively support the academic development of emergent bilingual and other diverse learners in high-diversity metropolitan school district settings are described in detail in the case study presented below. Pseudonyms for the school and school district and the campus leaders involved in the design-based instructional improvement efforts completed at this metropolitan high school are used throughout the case summary presentation.

Metropolitan High School Case Study

Leading Instructional Improvement for Emergent Bilingual Learners

Background

Raul Alejandro Trejos-Guerrera, a successful and well-respected veteran middle school principal in Barrera-Guajardo Metropolitan School District, was proud of the fact that he was a first generation, college-educated member of his family. Growing up in a very large, extended Mexican-Hispanic family in southwest Texas in the United States, Raul Trejos-Guerrera was very appreciative of the strong familial support and encouragement he continuously received from his parents, grandparents, and siblings as he pursued his early academic studies at the single elementary school situated within a small kindergarten through twelfth grade school district serving families in a rural community along the Texas–Mexican border. As Raul Trejos-Guerrera’s family home language was Mexican Spanish, Raul knew he had to work especially hard to learn English—particularly to become proficient in speaking and writing in English—in order to be successful academically and socially as he progressed through the American “elementary-middle-high school” educational system. As a young student progressing from elementary through middle and high school and then pursuing his undergraduate studies in a regional college, Raul was naturally curious about all subjects and was especially drawn to exploring the numerous connections that he intuitively recognized existed among the various core subjects of language arts/reading, math, and science (biology, botany, chemistry, physics) and how these core subjects interfaced with the social sciences (i.e., social studies in the areas of anthropology, history, sociology, political science, etc.).

Raul's fascination with the numerous natural interconnections that he recognized were strikingly evident between/among the natural sciences and the social sciences impressed upon him early—on the critical importance of developing his reading and writing skills in both English and Spanish—foundational language arts skills that he realized would be essential to supporting him as he progressed in his academic studies while in school as well as benefit him immensely as he pursued a professional career as an adult. Raul's intrinsic love of learning and his natural inclination to serve others led him to pursue an undergraduate degree in teaching. While teaching science and math in the Rio Grande valley in south Texas, Raul continued his collegiate studies and earned a master's degree in educational leadership with school principal professional certification. With these academic credentials in hand, Raul Trejos-Guerrera quickly advanced in his chosen professional career of "teaching and learning leader" as an assistant principal and then principal of secondary schools in south Texas.

At the start of his school administrative career, Raul Trejos-Guerrera had the good fortune to serve as the principal of the sole middle school in Barrera-Guajardo Metropolitan School District for five years. During that time, Trejos-Guerrera worked tirelessly as an instructional leader to instill in his faculty the importance of engaging in careful and methodical student learning data-informed instructional planning in ways that emphasized for the campus's students—many of whom were Hispanic/English dual language learners—the numerous *cross-curricular, interdisciplinary connections* that Trejos-Guerrera, from his own formative experiences as a multilingual learner, knew naturally existed between and among the core subjects in the campus's curriculum (i.e., math, science, social studies, and language arts). Trejos-Guerrera was passionate about wanting to nurture interdisciplinary learning environments on his middle school campus that could provide rich opportunities for students to explore the myriad interconnections between and among the core subjects in ways that could help further develop and deepen their dual-language reading and writing skills—critical "academic and social" knowledge acquisition and communication skills that could positively support these students in being able to pursue and succeed in a wide variety of career paths. Trejos-Guerrera was particularly focused on incentivizing faculty to engage together in *cross-curricular, interdisciplinary instructional teaming*—instructional teaming that centered on designing and delivering lessons and instructional units that could provide creative opportunities for students to explore the rich interdisciplinary interconnections among the various core subject areas (i.e., math, science, social studies, and language arts). As a campus instructional improvement leader, Trejos-Guerrera encouraged his teachers to design interdisciplinary lessons that could help students develop solid skills in multilingual language arts (i.e., developing reading and writing proficiency in both Spanish and English)—core knowledge acquisition and communication skills that would motivate and inspire students to want to leverage their own burgeoning multilingual reading and writing skills development as critical tools they could use to become successful life-long learners in both the natural and social sciences.

Addressing Persistent Instructional Improvement Challenges at Guadalupe Hidalgo East Central High School

As a result of his success at the middle school in working with teachers to help them learn how to plan effectively in grade-level teams to design, develop, and deliver interdisciplinary lessons and instructional units anchored in dual language skills development to jumpstart students' cross-curricular learning, Raul Trejos-Guerrera was tapped by Dr. Carlos Santiago Villarreal, superintendent of schools for Barrera-Guajardo Metropolitan School District, to serve beginning in the 2023-2024 school year as the new principal of the district's largest high school – Guadalupe Hidalgo East Central High School. Comprised of a student population consisting of 72 percent Hispanic, 11 percent African American, 16 percent Anglo, and 1 percent other—with a large percentage of the Hispanic students classified by the state as English Language Learners (ELLs) and Emergent Bilinguals (EBs), this sprawling high school campus of over 4,500 students has routinely struggled in dealing with glaring disparities between Hispanic and non-Hispanic students on Texas Academic Performance Report (TAPR) learning performance measurement indicators targeting overall academic performance in core subject areas and overall College and Career Readiness. The campus's large percentage of Hispanic students, in comparison with non-Hispanic students, notably underperform on all measures of English reading and writing competence, including on the Texas Success Initiative (TSI) assessments of students' learning progress in the core areas of English/Language Arts, Social Studies, Science, and Mathematics. Perhaps most concerning to school and district instructional leaders are the large numbers of Hispanic students who are *dual-language learners* at this high school. These Hispanic students have been classified since their enrollment in the district's elementary school as English as a Second Language (ESL) and Emergent Bilingual (EB) learners (students whose native home language is Spanish and who are learning English as their second language).

These Hispanic EB students have routinely struggled in their academic education year after year—from their experiences in the early elementary grades through middle school and even continuing in high school—to keep pace with the English language reading and writing skills development progress of their native English-speaking peers. As a result, these Hispanic emergent bilingual students have typically not advanced sufficiently in their academic learning to qualify for Dual Credit Enrollment in the high school's Early College High School Program (i.e., a program that enables high school-age students to enroll in college-level courses for dual credit as advance preparation for college / university learning), which further curtails these students' opportunities for post-high school academic and career learning advancement.

As an experienced campus administrator in Barrera-Guajardo Metropolitan School District, principal Trejos-Guerrera was well aware of the alarming achievement gaps existing within the district across the elementary school to middle and high school pipeline between Hispanic and non-Hispanic students. Because of his own educational background, Trejos-Guerrera was also acutely aware of how native-speaking Spanish students typically tend to encounter a “learning success bottleneck” in their academic learning early-on in their grade school experiences. This learning development stagnation—which can begin to occur quite early in the elementary grades and become more pronounced as native Spanish-speaking students move on into middle school—to a large extent is essentially due to the inability of teachers at the elementary and middle school levels to both understand the value of and have the instructional design capacities to know how to develop and incorporate carefully designed, robust *dual-language classroom lessons and learning units* into their grade-level instructional planning. For the large numbers of Hispanic students in the district who have been the victims of this “learning success bottleneck” for emergent bilingual learners and who, as a result, have demonstrated “frozen” learning progress on academic performance indicators in the upper elementary and middle grades, by the time these emergent bilingual Hispanic students reach high school their academic learning performance—as documented on the district and state's annual academic learning assessment indicators—has been significantly diminished. Raul Trejos-Guerrera knew that proactively addressing the negative impact of this dual-language learning bottleneck that was endemic in the district would need to be among his main priorities in his newly appointed position as the principal and instructional leader of Guadalupe Hidalgo East Central High School. Thus, principal Trejos-Guerrera was able to generate the following initial (*high inference*) Problem of Practice statement articulating the specific student-learning problem confronting Guadalupe Hidalgo East Central High School educators: *Administrators and instructional staff at Guadalupe Hidalgo East Central High School must work proactively to instructionally support the campus's large population of emergent bilingual learners and related diverse student groups who have experienced diminished learning progress in upper elementary and middle grades and beyond as a result of encountering 'dual-language learning bottlenecks' in the district's biliteracy learning development support system.*

Principal Trejos-Guerrera worked proactively during summer 2023 in preparation for the start of the 2023-2024 school year in August by reviewing Guadalupe Hidalgo East Central High School's student learning performance records for all student population groups. During July he also began informally interviewing the campus's department chairs, grade-level professional learning community (PLC) team leaders, and teachers to get a sense of educators' perspectives regarding the learning challenges the campus's large population of Hispanic and dual-language students were facing and how teachers were working to address these challenges. The feedback principal Trejos-Guerrera received during these informal meetings, particularly with teachers and PLC team leaders, was discouraging although not unexpected. During their conversations with principal Trejos-Guerrera, teachers across all core content areas (science, mathematics, social studies, and English/language arts) voiced their strong opinions regarding what these teachers perceived to be the complacent attitudes and low learning motivation levels of the majority of Hispanic students in their classrooms. Notably, several of the veteran teachers principal Trejos-Guerrera interviewed complained openly that it was unfair to hold teachers accountable for the below-par learning performance of their emergent bilingual Hispanic students. According to these teachers, these emergent bilingual students had already demonstrated repeatedly from ninth grade onward that these students' poor learning performance in the core content areas was not the fault of teachers' planning and instructional practices but the direct result of these students' own “low motivation levels” for learning high school-level subject matter content and their often-demonstrated “limited interest” in participating in classroom learning activities.

Several teachers, in fact, openly complained to principal Trejos-Guerrera that the school's previous principal was the one who was really at fault as these teachers, quite frequently during regular classroom instructional time, simply could not handle attempting to manage their non-attentive, disruptive Hispanic emergent bilingual (EB) students while also trying to focus on effectively teaching the other students, and often had to resort to sending these EB students to the principal's office for discipline. According to the teachers, this teacher practice of removing disruptive EB students from their classrooms by sending them to the principal's office for discipline rapidly deteriorated into being nothing more than a never-ending cycle of futile "classroom disruption and principal office discipline referrals", as the principal after a short time simply sent these students right back to their classrooms and berated the teachers for their poor classroom management abilities. While listening attentively and in a non-judgmental way to these teachers' complaints about their Hispanic EB learners, because of his instructional leadership experiences working with teachers at his previous middle school campus, principal Trejos-Guerrera knew that these teachers' negative complaints about their Hispanic emergent bilingual students' nonchalant learning attitudes and disruptive classroom behaviors were really "surface-level symptoms" of a much deeper problem. Unfortunately, principal Trejos-Guerrera knew all too well that the real underlying root-causal problems fueling the surface-level "Hispanic student attitudes and classroom behavior management issues" teachers were so vociferously complaining about were not the fault of these Hispanic emergent bilingual students. In fact, these Hispanic EB students' learning problems all too often could be traced directly to: 1) teachers' own *delimiting pedagogical beliefs* about the learning potential of their Hispanic emergent bilingual students that were driven in large part by teachers' own *lack of knowledge and insightful understanding* of the unique developmental learning needs of dual-language learners; and 2) these teachers' resultant *lack of interest* in wanting to acquire the appropriate instructional team planning skills to learn how to effectively design and develop creative dual-language instructional units and deliver these instructional units in their classrooms in ways that could motivate Hispanic EB students to want to participate and become actively involved with their native English-speaking peers in academic content learning.

Despite being an experienced administrator with a multi-year track record of successfully dealing with the often shortsighted pedagogical beliefs and inadequate instructional planning practices of teachers who are working with emergent bilingual students, principal Trejos-Guerrera was nonetheless taken aback by the sheer intensity of the powerfully voiced perspectives he encountered during his interviews with department chairs, grade-level professional learning community (PLC) team leaders, and core content teachers. Many of the educators he interviewed had clearly developed over time some deeply ingrained negative perceptions regarding the motivation levels and learning potentials of the campus's Hispanic emergent bilingual students. The collective results of these early interviews with his educator staff convinced principal Trejos-Guerrera that he needed to spend time carefully analyzing the campus's array of available student learning performance data along with observational evidence associated with teachers' instructional planning and classroom teaching practices to further investigate the issues involved. In doing so, principal Trejos-Guerrera hoped to be able to uncover additional data that could corroborate his inferences regarding what his previous years of administrative leadership experience told him could potentially be the real underlying root causes of this high school's Hispanic emergent bilingual student learning performance problem.

Principal Trejos-Guerrera knew that he would have to prioritize actively involving as many as possible of the campus's assistant administrators and key grade-level instructional leaders early-on in his "student learning performance data analysis efforts" if the investigative findings he hoped to produce were to be taken seriously by the high school's large contingent of ninth through twelfth grade educator staff. Thus, principal Trejos-Guerrera organized a campus-wide *Instructional Improvement Data Analysis Team* that was comprised of the high school's four assistant principals and department chairs of each core content area along with faculty leaders of each grade-level professional learning community (PLC) instructional planning group. As leader of this Guadalupe Hidalgo East Central High School Instructional Improvement Team, principal Trejos-Guerrera and his team colleagues embarked on their analytic mission by first conducting an extensive Exploratory Needs Assessment (ENA). As part of their ENA activities, team members collected multiple kinds of relevant data that they felt would enable them to investigate and identify possible "inhibiting and/or causal factors" that might be contributing to the persistent learning performance gaps demonstrated by the campus's dual-language, emergent bilingual students in comparison with other native English-speaking student groups. To this end, the team collected and compiled together a variety of relevant student-learning performance data over the five previous academic years to structure and inform their analysis efforts.

These multi-year data included: 1) available student-learning benchmark data in all four core content areas (math, science, social studies, and English/language arts) obtained through student-learning formative assessments across multiple nine-week cycles during each academic year; 2) student performance scores on all core content area End of Course Exams required by the state during each academic year reviewed; and 3) relevant Hispanic students' English language learning scores from year to year on Texas English Language Proficiency Assessment System (TELPAS) assessments. [Note: The TELPAS is an assessment program for students in Texas public schools who are learning the English language. The TELPAS assessment is administered annually to students who have been identified as English learners (ELs). The TELPAS system assesses English language proficiency in four language domains: listening, speaking, reading, and writing.] Principal Trejos-Guerrera and his investigative team colleagues also decided to embark during September and October of the 2023-2024 school year on an extensive series of observations of teachers during their grade-level PLC instructional team planning meetings in conjunction with multiple informal group interviews with teacher members of these grade-level PLC teams. In doing this, principal Trejos-Guerrera and his investigative colleagues hoped to obtain: 1) *observational data* on teachers' grade-level instructional planning behaviors and methods of working together; as well as 2) important *perspectivist data* from teachers that could provide some critical insights into teachers' own pedagogical beliefs and attitudes that might be contributing to and/or partially driving teachers' overall instructional planning and classroom teaching practices.

Principal Trejos-Guerrera and his investigative team's comprehensive analyses of the campus's multi-year student learning performance data along with their careful review of detailed notes team members generated during observations of grade-level PLC meetings and extended informal interviews with multiple teachers across grade levels yielded some intriguing data-informed insights. These insights pointed to some "key factors" (i.e., underlying *root causes*) that appeared to be contributing to and fueling the persistent learning performance deficiencies documented across the past several years involving the population of emergent bilingual students at Guadalupe Hidalgo East Central High School. At a macro level of analysis, the investigative team's insights highlighted three overarching "key factors" (i.e., *macro-level insights*) in particular involving teachers' pedagogical beliefs and attitudes and their instructional planning practices, namely: 1) teachers' own entrenched views and attitudes regarding what teachers perceived to be the limited motivation levels and learning capabilities of the emergent bilingual students in their classrooms; 2) the limited and ineffective instructional planning practices exhibited by grade-level PLC teacher teams driven largely by teachers' own inadequate knowledge of and experience with authentic data teaming and data-informed instructional unit design; and 3) teachers' lack of familiarity with and hesitancy to embrace instructional best practices on *dual language programming* to support the biliteracy academic development of emergent bilingual learners. At a more granular level, principal Trejos-Guerrera and his investigative team's collective data analyses (i.e., particularly involving the team's analyses of available incremental nine-week student-learning assessment data for each academic year reviewed in conjunction with careful observations of teachers' own grade-level PLC instructional team planning activities) also uncovered some intriguing *micro-level insights*. These micro-level insights included the following data-informed revelations regarding both student learning performance and teacher team instructional planning across all grade levels at Guadalupe Hidalgo East Central High School: 1) student writing performance on extended tasks is inconsistent across grade levels; 2) writing instruction is not vertically aligned; teachers use different approaches to writing across grade levels; 3) writing in Spanish is often deprioritized; accountability pressures and limited bilingual resources result in more time spent on English writing, impacting biliteracy development; 4) teachers have limited knowledge and instructional skills in genre-based writing, including minimal training in scaffolding genres across languages, which contributes to proficiency gaps; 5) writing is not a focus in PLCs; teachers during their PLC team meetings do not consistently analyze student writing, align instruction, or plan genre-based lessons collaboratively; 6) instructional materials lack coherence as teachers routinely pull from various sources with uneven rigor, and district guidance offers little support for biliteracy writing; and 7) data use by teachers to support students' writing development is inconsistent as writing assessments and rubrics are not regularly used by teachers to drive instruction or monitor growth in both languages.

Armed with these macro- and micro-level data-analytic insights highlighting multiple key factors and interrelated underlying root causes potentially fueling the persistent learning problems associated with the campus's population of Hispanic emergent bilingual students, principal Trejos-Guerrera and his investigative team decided to review multiple relevant literatures that they believed could provide useful information regarding current knowledge, student assessment data analysis techniques, instructional planning strategies, and classroom teaching best practices for effectively planning for and teaching diverse emergent bilingual learners.

The team focused their review efforts on the following literatures: 1) bilingualism and second language acquisition (Cummins, 1979, 1981, 2000; de Jong & Harper, 2005; MacSwan, 2017; Phillips Galloway et al., 2020; Sparrow et al., 2014); 2) dual language instructional planning (Chin et al., 2009; Goldenberg, 2008; Ramirez & Faltis, 2020); 3) teacher deficit thinking (Dudley-Marling, 2015; Dweck, 2016; Ende, 2016; Goddard et al., 2015; Valencia, 2010, 2015, 2020); 4) authentic data teaming for data-driven decision making and instructional capacity-building (Bernhardt, 2013; Blanc et al., 2010; Boudett et al., 2010; Bouwmans et al., 2017; Bowers et al., 2014; Dufour & Fullan, 2013; Dufour et al., 2004; Dufour et al., 2016; Kennedy & Jones, 2015; Krečič & Grmek 2008; Lachat & Smith, 2005; Lieberman et al., 2014; Love et al., 2008; Love, 2009; Mandinach, 2012; Mandinach & Honey, 2008; Mandinach & Jackson, 2012; Martinez & McGrath, 2014; Marzano et al., 2016; Murphy, 2016; Stringer, 2013; Supovitz & Klein, 2003; Venables, 2011, 2014; White, 2011); and 5) dual language writing development and assessment strategies to support emergent bilingual students' successful academic learning across multiple content areas and to close achievement gaps (Cummins, 2021; Cummins & Early, 2011; Echevarria & Vogt, 2010; Echevarria et al., 2017; Graham & Herbert, 2010; Griner & Stewart, 2012; Hill, 2024; Khalifa et al., 2016; Little & Kirwin, 2019; Theoharis & Brooks, 2012). These literatures collectively provided principal Trejos-Guerrera and his instructional improvement team with additional insights and literature-supported best practice strategies to inform their overall investigative efforts.

Problem Reframing. Principal Trejos-Guerrera and his investigative team's collective analyses of Guadalupe Hidalgo East Central High School (ECHS) student and teacher data in conjunction with their review of relevant instructional best practice literatures caused them to "reframe" their investigative thinking regarding what were the plausible *data-supported underlying causes* of their campus's emergent bilingual students' persistent academic learning deficiencies. Based on the insights gleaned from their review of current best practice literatures on bilingualism and biliteracy academic development for second language learners, teachers' deficit thinking inclinations regarding second-language acquiring emergent bilingual students, and the importance of writing development and assessment strategies to support emergent bilingual students' successful learning across the core content areas in conjunction with results obtained from the investigative team's analyses of students' multi-year benchmark assessment data and their review of notes from grade-level PLC teacher team observations and teacher informal interviews, principal Trejos-Guerrera and his team colleagues now understood that they would have to "reframe" principal Trejos-Guerrera's original initial (*high inference*) Problem of Practice thinking. (Principal Trejos-Guerrera's initial Problem of Practice thinking for Guadalupe Hidalgo ECHS had focused on blaming emergent bilingual students' diminished learning progress in upper elementary and middle grades and beyond and resultant persistent student-learning performance deficiencies in high school on the "dual-language learning bottlenecks" that were inherent in the district's insufficient elementary through secondary biliteracy learning development support system). In order for campus leadership to be able to effectively address the surface-level "Hispanic emergent bilingual (EB) student-learning performance gap" problem on their campus, principal Trejos-Guerrera and his instructional improvement team would have to refocus their change-agent leadership thinking to address directly the underlying *root causes* of this student-learning problem.

The investigative team now fully realized that these underlying root causes driving their campus's EB student-learning performance gap problems were, in fact, *professional practice issues* that could be traced directly to teachers' own deficit pedagogical thinking regarding their perceptions of the learning motivation levels and academic capabilities of their Hispanic EB students and teachers' resultant ineffective instructional planning behaviors and classroom teaching practices. As a result of these realizations, principal Trejos-Guerrera and his instructional improvement team were able to generate the following new root-causal, data analysis-informed **reframed (*low inference*) Problem of Professional Practice rationale statement** for Guadalupe Hidalgo East Central High School campus educators: *Guadalupe Hidalgo East Central High School core content teachers have developed entrenched deficit thinking attitudes and 'negative pedagogical mindsets' regarding the perceived motivation levels and learning potentials of our campus's emergent bilingual students. To counteract this negative bias against EB learners and bilingualism in general, grade-level teams of core content teachers are in need of targeted knowledge and skills acquisition training on how to engage in 'comprehensive, data-informed student-learning progress analyses' to learn how to: 1) leverage the results of grade-level student-learning performance assessment reviews to intentionally probe and more clearly understand the 'underlying root causes' of EB students' learning performance deficiencies;*

2) incorporate intensive ‘biliteracy writing development’ into their instructional unit planning and student-learning benchmark assessments; and 3) utilize new instructional strategies obtained through ongoing coaching/collegial mentoring support from the campus’s Dual Language Coordinator and grade-level PLC instructional planning leaders on how to properly integrate ‘dual language [Spanish and English] instructional unit design’ programming into their overall team planning practices to better address the dual language academic development needs of emergent bilingual students. Following from this reframed Problem of Professional Practice rationale statement, principal Trejos-Guerrera and his investigative team then formulated the following **refined Theory of Action (If/Then) operational statement**: If grade-level teacher teams are provided with sufficient PLC instructional planning time guided by knowledgeable and experienced dual-language coaching mentors, structured support in learning how to properly analyze student writing data in both English and Spanish to identify specific writing deficiencies, and targeted professional development in bilingual genre-based writing instruction, then teachers will be better equipped to *plan and deliver fully aligned and scaffolded interdisciplinary writing lessons and instructional units that cut across the core content areas in ways that meet state and district grade-level learning performance expectations*. As a result, all students (both native English-speaking and native Spanish-speaking emergent bilingual students whose second acquisition language is English) will achieve solid interdisciplinary-connected learning in the core content areas and will demonstrate stronger and more consistent learning performance on extended writing tasks both within and across grade levels.

Based on the above analytic logic and further informed by teacher development insights and bilingual, interdisciplinary instructional team-planning strategies gleaned from review of relevant literatures, principal Trejos-Guerrera and his instructional improvement team colleagues were able to construct the following **Guadalupe Hidalgo East Central High School (ECHS) Change Drivers Diagram** as a conceptual schematic to guide their “intervention program design planning” to address teachers’ identified problem of professional practice (see Figure 1).

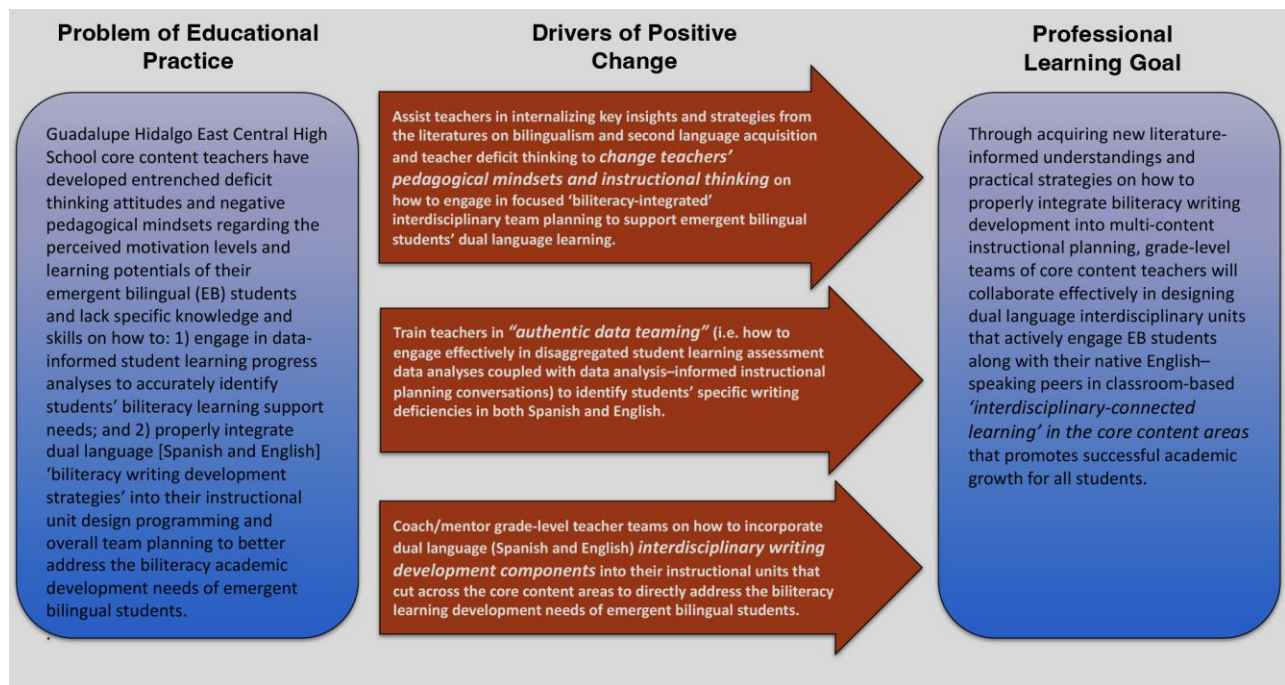


Figure 1 Guadalupe Hidalgo ECHS Change Drivers Diagram

The Guadalupe Hidalgo East Central High School Change Drivers Diagram included three operational action strategies that the instructional improvement team believed would be critical to implement in order to: 1) jumpstart positive changes in educators’ overall pedagogical approaches to multi-content area teaching and learning on the campus; and 2) bring about demonstrable improvement in teachers’ overall student-responsive instructional planning and classroom teaching practices.

The first change driver focused on assisting teachers across ninth through twelfth grade levels in becoming familiar with key concepts and instructional planning and teaching strategies contained in the current literatures on bilingualism and second language acquisition—with a special emphasis on exposing teachers to recent instructional literature highlighting the critical importance of “biliteracy writing development” across the core content areas for emergent bilingual students. In conjunction with this, teachers were also encouraged to internalize insights and understandings from the literature on professional mindsets in order to help teachers *scrutinize and change their own pedagogical mindsets and instructional thinking* on how teachers can work together in their grade-level PLC teams to: 1) engage in intensive data analyses of their students’ learning performance assessments; and then 2) leverage the results of these analyses to inform targeted, *biliteracy-integrated* interdisciplinary team planning to support the campus’s large population of emergent bilingual students’ dual language learning.

The second change driver involved providing teachers with detailed professional development training sessions on principles and practices associated with “authentic data teaming”. These training sessions emphasized helping teachers gain practical knowledge and skills on how to engage effectively in disaggregated student-learning assessment data analysis coupled with how to properly leverage those data analysis results to drive data-informed instructional planning conversations that could help teacher teams identify and plan to address their students’ specific dual-language (i.e., Spanish and English) writing deficiencies. Finally, the third change driver provided teacher teams with a series of hands-on coaching and mentoring support modules on how to effectively incorporate “dual language” (Spanish and English) interdisciplinary writing development components that cut across the core content areas into their interdisciplinary instructional units to directly address the biliteracy academic learning development needs of their emergent bilingual students.

Intervention Program: Design, Development, and Implementation

With their Change Drivers Diagram in hand, principal Trejos-Guerrera and his instructional improvement team colleagues were then able to move forward to design the campus’s “intervention program implementation plan” to address teachers’ identified problem of professional practice. Using the newly developed data analyses–informed and literature-supported Change Drivers Diagram as a “conceptual roadmap” for how to enact meaningful instructional improvement on their campus, principal Trejos-Guerrera and his intervention task force colleagues were then able to construct their detailed **Instructional Improvement Intervention Program “Implementation Plan”** for Guadalupe Hidalgo East Central High School (see Table 1). Principal Trejos-Guerrera and his team intentionally designed their intervention program in ways that would enable teachers to interact directly and become familiar with instructional planning and classroom teaching strategies contained in the current literature on instructional improvement for bilingual learners as well as the literature relating to teachers’ pedagogical deficit thinking. The intervention program’s professional learning design included both knowledge and skills acquisition modules as well as hands-on instructional unit development projects and iterative coaching and collegial mentoring cycles within which teams of teachers were able to *directly apply* their newly acquired instructional insights and teaching strategies in their day-to-day classroom teaching and receive honest feedback on their application efforts from peer mentors.

The multi-week intervention program consisted, on the front end, of an initial series of professional development (PD) content knowledge and skills acquisition modules. These knowledge and skills modules were anchored solidly in the current literatures on bilingualism and second language acquisition, dual language instructional planning, teacher deficit thinking, and authentic data teaming. Importantly, these initial modules also included a particular emphasis on assisting teachers in acquiring critical knowledge and skills on how to effectively integrate an array of multileveled and scaffolded *biliteracy writing development and assessment strategies* into their instructional unit planning efforts. The purpose of focusing on these collective biliteracy writing development and assessment strategies was to highlight for teachers the critical importance of incorporating a *robust program of multiple “genre-based” writing development activities* into their grade-level team interdisciplinary instructional unit planning efforts in order to be able to effectively support emergent bilingual students’ successful academic learning across the core content areas. Following teachers’ participation in these initial knowledge and skills acquisition modules, the intervention program then immersed teachers in carefully structured “hands-on, immersive team-learning” instructional unit development projects along with important follow-up “peer observation/coaching and collegial mentoring” classroom application activities that were collectively designed to expand and deepen teachers’ capacities to be able to collaborate together in “dual language” (i.e., Spanish and English dual language–integrated) interdisciplinary instructional planning and teaching to address the specific biliteracy academic learning development needs of their students.

Table 1 Guadalupe Hidalgo East Central High School Instructional Improvement Intervention Program “Implementation Plan”

WEEK	FORMAT	CONTENT / ACTIVITY
1	Meetings of all selected participants	<p>Content knowledge and skills acquisition modules:</p> <ul style="list-style-type: none"> ▪ Overview of foundational concepts in the recent literature on multilingual pedagogy: bilingualism, multilingualism, social versus academic biliteracy ▪ Understanding the cultural, linguistic, and socioeconomic backgrounds and “academic biliteracy” learning development and support needs of emergent bilingual (EB) students ▪ Exploring concepts of pedagogical justice, multilingual pedagogy and instruction, and the academic and social skills development advantages associated with overhauling the design and delivery of learning for multilingual students (Zwiers, 2024); and conceptualizing a <i>life-long learning developmentally grounded and justice-centered approach</i> to teaching multilingual students ▪ Critically examining educators’ potential <i>deficit thinking mindsets and practices</i> regarding student bilingualism and biliteracy: how unintended biases and preconceptions can influence educators’ perceptions of EB students’ motivation levels and “academic biliteracy” learning capabilities ▪ Examining research on <i>linguistic interdependence</i> and <i>cross-language transference</i> (i.e., empirical evidence demonstrating how certain aspects of dual language learning, processing, and usage are significantly and positively correlated and that strong language skills development—including robust writing development—in students’ “native language” facilitates language skills development in the second “acquisition language”) (Cummins, 1979, 1981, 2021) ▪ Expanding teachers’ understandings of the instructional payoffs of building students’ dual language writing development across the disciplines through embracing a <i>biliteracy approach</i> to interdisciplinary instructional planning and classroom-based teaching and learning; Developing teachers’ capacities in learning how to incorporate genre-based writing development as a major focus of instruction into their grade-level PLC team planning to create scaffolded “genre-based” lessons across languages (i.e., Spanish and English) ▪ Coaching teacher teams on how to conceptualize and develop fully aligned and rigorous <i>interdisciplinary-immersive</i> “dual language writing development-intensive instructional units” both within and across grade levels ▪ Developing teachers’ capacities in utilizing a variety of content-aligned writing development materials and strategies—including learning how to incorporate <i>creative writing scaffolding supports</i> (such as: visuals, movements, stories, and peer-to-peer interactions) along with active teacher-initiated dual language <i>writing modeling strategies</i> into their writing development lessons and associated classroom-based writing activities—to enhance emergent bilingual students’ biliteracy interdisciplinary learning (Zwiers, 2024)

		<ul style="list-style-type: none"> ▪ Assisting teacher teams in learning how to integrate <i>intentional co-teaching</i> for multilingual learners into their grade-level instructional planning efforts—i.e., core content area teachers partnering with multilingual learning professionals (e.g., Spanish heritage language teachers) to engage in collaborative instructional planning, teaching, and assessment efforts to effectively address the overall biliteracy learning support needs of multilingual learners (Porter, 2024) ▪ Providing grade-level PLC teams with expanded bilingual writing resources and supporting teachers in learning how to develop and incorporate rigorous data-driven dual language writing assessments and rubrics into their overall instructional planning and teaching practices to monitor and invigorate emergent bilingual students’ demonstrable learning growth in both English and Spanish (Cummins, 2021; Cummins & Early, 2011; Little & Kirwin, 2019; Theoharis & Brooks, 2012) <p>Critical questions to drive teacher team discussions:</p> <ul style="list-style-type: none"> ▪ What are the advantages of <i>bilingual writing development-intensive interdisciplinary instructional teaming</i> for enhancing emergent bilingual and English-speaking students’ classroom-based, interactive peer learning? ▪ What are the advantages of <i>bilingual writing development-intensive interdisciplinary teaming</i> for enhancing teachers’ continuous professional learning? ▪ How can core content teachers and other educators (e.g., Spanish heritage language teachers, multilingual instructional support staff, grade-level instructional coaches) engage together in targeted “dual language writing development-focused” instructional planning to design and implement creative <i>biliteracy instructional units and assessments</i> that are solidly anchored in robust writing development in both English and Spanish to support emergent bilingual students’ successful “biliteracy” interdisciplinary learning?
2	Meetings of all selected participants	<p>Sessions on <i>authentic data teaming</i> practices:</p> <ul style="list-style-type: none"> ▪ Understanding the difference between “PLC lite” and authentic data teaming (Dufour & Reeves, 2016) ▪ Modeling by assistant principals and instructional coaches on how core content area teachers and Spanish heritage language teachers can collaborate as grade-level <i>bilingual, interdisciplinary instructional teams</i> in analyzing EB and other students’ disaggregated benchmark and formative assessment data to investigate and identify underlying root causes of students’ learning deficiencies ▪ Utilizing root-causal data analysis to pinpoint <i>inhibiting factors</i> impeding emergent bilingual students’ academic biliteracy development (Love et al., 2008; Love, 2009) ▪ Leveraging the results of disaggregated root-causal data analyses to inform and guide <i>collaborative data conversations</i> about bilingual, cross-curricular instructional unit planning (Love et al., 2008; Love, 2009)

		<ul style="list-style-type: none"> ▪ Core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers in each grade level participate in an <i>immersive biliteracy team-learning project</i> (with direct modeling and feedback support provided by instructional coach facilitators) on how to engage together in “authentic data teaming” (i.e., disaggregated data analyses followed by focused data conversations) to design, plan, and implement a complete “bilingual, interdisciplinary instructional unit” in their classrooms ▪ Involving participating teachers in in-depth conversations on the “multiple benefits” to both educators and students of engaging in <i>highly immersive</i> interactive learning experiences that: 1) deepen active learning engagement; 2) expand individual and group learning capacities; 3) build relational bonds across learners; 4) incorporate opportunities for peer-to-peer coaching into the overall learning process; and 5) promote long-term communal learning success
3 through 5	Classroom observation/peer coaching and collegial mentoring cycles	<ul style="list-style-type: none"> ▪ Teachers will conduct multiple classroom observations of fellow teachers’ efforts in incorporating biliteracy writing development across the core content areas into their daily classroom teaching practices in ways that promote emergent bilingual (native Spanish–speaking) and native English–speaking students’ interactive, interdisciplinary peer learning. ▪ Core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers are paired into “co-partner teams” to engage in multiple classroom observation/peer coaching and collegial mentoring cycles to examine teachers’ effectiveness in applying their newly acquired content knowledge and differentiated instructional strategies to their classroom biliteracy teaching practices. ▪ Co-partner teacher teams also observe students to identify successful instructional strategies and peer-to-peer interactive activities that foster students’ active engagement in biliteracy deeper learning.
3 through 5	Individual interview meetings with co-partner teacher teams	<ul style="list-style-type: none"> ▪ Ongoing informal interviews with co-partner teams of core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers in each grade level to encourage teachers to share their perspectives and insights gleaned from their participation in the multi-week (weeks three through five) iterative observation/coaching and collegial mentoring cycles

Principal Trejos-Guerrera and his intervention program colleagues, along with the campus’s seven full-time instructional coaches, served as session facilitators for the various new knowledge and skills acquisition meetings and immersive team learning activities that comprised the Guadalupe Hidalgo East Central High School Instructional Improvement Intervention Program (see Table 1). Educators from across the whole campus were selected to participate in the intervention program, including ninth through twelfth grade *content specialists* (i.e., core content teachers with teaching assignments in the various state-tested core content areas: English/language arts, mathematics, science, and social studies) and *multilingual learning specialists* (i.e., Spanish heritage language teachers and other bilingual education–certified teachers).

A total of thirty-two ninth through twelfth grade core content area teachers (eight teachers from each grade level) and twelve multilingual learning teachers (seven Spanish heritage language teachers and five other bilingual education–certified teachers) participated in the intervention program.

The five-week intervention program was implemented during January and February 2024. As an integral component of intervention program implementation activities, principal Trejos-Guerrera and his intervention team collected and analyzed an extensive array of PLC observational and informal interview data from teacher participants as teams of teachers navigated through the various professional learning modules comprising the five-week intervention program. The purpose of these data collection and analysis activities was to enable the intervention program designers to examine the impact the various iterative knowledge and skills acquisition, hands-on instructional unit project planning, and classroom-based application and peer mentoring activities had on helping teachers: 1) *critically examine* their own pedagogical thinking (i.e., teachers’ current beliefs and attitudes regarding the academic aptitude and learning motivation levels of their emergent bilingual students); and 2) *change* (i.e., broaden and deepen) their instructional planning and classroom teaching practices through embracing a “dual language writing development–intensive interdisciplinary approach” to supporting emergent bilingual students’ biliteracy learning.

A primary goal of the five-week intervention program was to expand Guadalupe Hidalgo East Central High School grade-level teachers’ understandings of the instructional payoffs of building students’ dual language writing development across the disciplines through embracing a *biliteracy approach* to interdisciplinary instructional planning and classroom-based teaching and learning. More specifically, the “knowledge and skills acquisition” and grade-level teacher team “interdisciplinary instructional unit project development” activities embedded in the professional learning intervention program design focused on building teachers’ capacities in learning how to incorporate *dual language–centered, genre-based writing development* into their grade-level PLC team interdisciplinary planning to create scaffolded, genre-based “interdisciplinary-immersive” lessons that provided students with targeted opportunities to develop and refine both their native heritage language (Spanish) and second acquisition language (English) literacy skills through engaging in reciprocal, multi-content infused interdisciplinary learning. This *dual language writing development–integrated* interdisciplinary curriculum design is depicted in Figure 2.

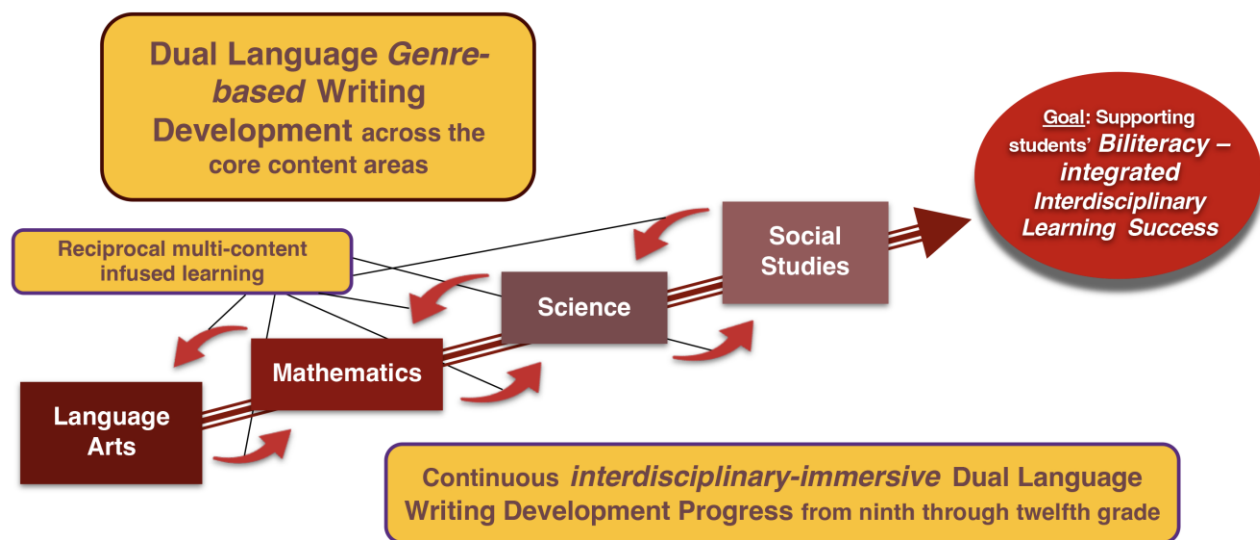


Figure 2 Dual Language Writing Development–integrated Interdisciplinary Curriculum

In addition, the sequential series of interactive new knowledge and skills acquisition modules that included opportunities for teachers to engage in individual and team-centered critical self-reflection on their own potentially delimiting pedagogical beliefs and current instructional practices followed by the multiple grade-level teams’ hands-on, immersive interdisciplinary unit development project-learning and classroom application activities highlighted the overall *immersive team learning design* of the Guadalupe Hidalgo East Central High School (ECHS) Intervention Program.

These iterative team-learning processes and activities challenged multiple grade-level teams of core content area teachers, Spanish heritage language teachers, and other bilingual education–certified teachers across ninth through twelfth grades to reevaluate their current deficit thinking pedagogical mindsets and behaviors and reconceptualize *as grade-level teacher teams* how they could go about reinventing and reinvigorating their collective, team-centered instructional planning and teaching practices. The Guadalupe Hidalgo ECHS intervention program’s “immersive team learning” design is depicted in Figure 3. The program’s *team learning* design actively involved participating teachers in progressively expanding and deepening their team-centered professional learning through: 1) acquiring *new content knowledge and informed understandings* regarding the unique backgrounds and specific academic learning development and support needs of immigrant/emergent bilingual and other culturally and linguistically diverse students; 2) engaging in *critical self-reflection* on teachers’ own deficit thinking mindsets and delimiting instructional practices in relation to students’ emergent bilingualism and biliteracy developmental potential; 3) gaining new literature-informed insights on the power of incorporating dual language writing development directly into teachers’ instructional unit planning to turbocharge students’ biliteracy multi-content interdisciplinary learning; 4) understanding the payoffs for both teachers and students of engaging together in *authentic data teaming practices* to redirect and rejuvenate teachers’ “dual language writing development–anchored” instructional planning through actively participating in hands-on, immersive team-centered “*biliteracy, interdisciplinary instructional unit*” *development and classroom implementation project activities*; 5) implementing the newly developed dual language instructional units in classrooms with co-partner teams of teachers participating actively in iterative sets of *classroom observation/peer coaching and intensive collegial mentoring cycles* to gauge and evaluate the impact of the newly designed instructional units on students’ overall learning engagement; and 6) participating in a culminating series of grade-level team *debriefing sessions* to share biliteracy instruction “implementation insights” and dual language writing development across the content areas “best practices” on how to effectively respond to and address the unique biliteracy academic learning and instructional support needs of their emergent bilingual students.

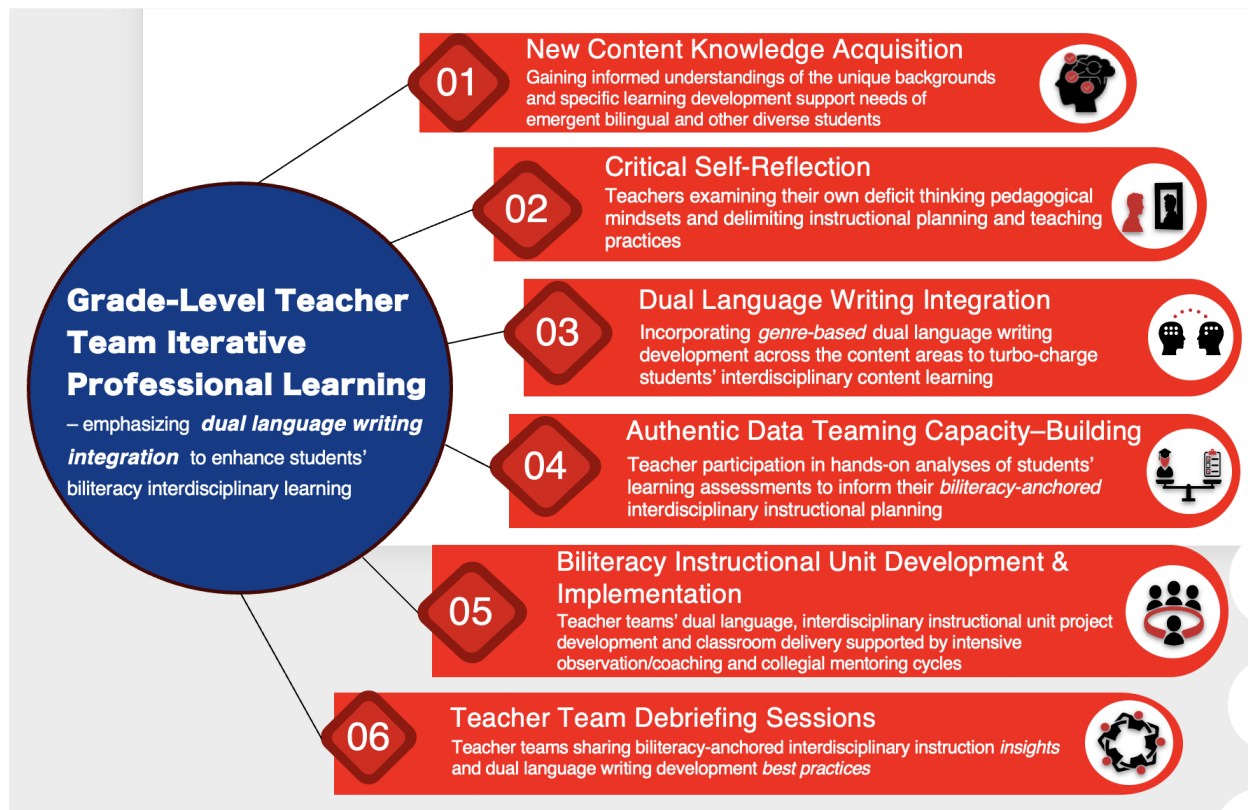


Figure 3 Guadalupe Hidalgo ECHS Intervention Program *Immersive Team Learning Design*

Guadalupe Hidalgo ECHS Instructional Improvement Intervention Program - Results and Findings

Multiple process and impact data were collected and analyzed during the implementation of the professional learning intervention program to gauge the effect of the intervention program on changing educators' pedagogical thinking and instructional practices. The Guadalupe Hidalgo East Central High School case study's *process data* consisted of: 1) reactions of participating teachers to the individual "knowledge and skills development" PD modules obtained through written comments and feedback on exit tickets completed by teacher participants at the conclusion of each PD session; 2) intervention program participants' perspectives solicited during informal individual and group interviews that were conducted at various points during the multi-week intervention program to gauge any demonstrable changes in teachers' pedagogical thinking as they participated in the PD sessions and immersive learning activities; and 3) intervention design team members' own observations of teachers' planning activities and interactions during their weekly grade-level PLC team meetings to discern if teachers' collective involvement in the intervention program's "knowledge and skills development" sessions and "applied learning" activities was having any noticeable impact in moving teachers toward actively integrating robust data teaming and dual language writing development into their overall instructional planning practices. *Impact data* collected and analyzed following the intervention program's implementation consisted of: 1) responses of all participating teachers (i.e., core content area teachers, Spanish heritage language teachers, and other bilingual education-certified dual language teachers) to pre- and post-evaluative Qualtrics surveys administered prior to the start of and following the completion of the intervention program; and 2) an additional series of informal "co-partner team interviews" and "teacher grade-level team debriefing sessions" conducted during the final two weeks of the intervention program. These informal "co-partner team interviews" and "teacher grade-level team debriefing sessions" were designed to assess the professional learning effect the "co-partner team" multiple peer observation/coaching and collegial mentoring cycles had on participating teachers' *multicultural pedagogical thinking and dual language writing development-integrated instructional planning and teaching practices* and the collective impact the overall five-week intervention program had on changing teachers' pedagogical beliefs and understandings regarding the payoffs to both students and teachers of systematically incorporating *dual language writing development across the core content areas* into their grade-level and cross-grade-level interdisciplinary instructional planning. Principal Trejos-Guerrera and his intervention program design team's collective analyses of these various process and impact data provided some positive evidence supporting the effectiveness of the multi-week intervention program in addressing Guadalupe Hidalgo East Central High School's identified root-causal Problem of Professional Practice for campus educators [i.e., *Guadalupe Hidalgo East Central High School core content teachers have developed entrenched deficit thinking attitudes and 'negative pedagogical mindsets' regarding the perceived motivation levels and learning potentials of our campus's emergent bilingual students. To counteract this negative bias against EB learners and bilingualism in general, grade-level teams of core content teachers are in need of targeted knowledge and skills acquisition training on how to engage in 'comprehensive, data-informed student-learning progress analyses' to learn how to: 1) leverage the results of grade-level student-learning performance assessment reviews to intentionally probe and more clearly understand the 'underlying root causes' of EB students' learning performance deficiencies; 2) incorporate intensive 'biliteracy writing development' into their instructional unit planning and student-learning benchmark assessments; and 3) utilize new instructional strategies obtained through ongoing coaching/collegial mentoring support from the campus's Dual Language Coordinator and grade-level PLC instructional planning leaders on how to properly integrate 'dual language [Spanish and English] instructional unit design' programming into their overall team planning practices to better address the dual language academic development needs of emergent bilingual students.*].

The intervention design team's collective analyses of the sets of process and impact data collected during the intervention program's multi-week implementation generated some discernible **Design-Based School Improvement Results and Findings** associated with the Guadalupe Hidalgo East Central High School Instructional Improvement Intervention Program. Several **design research results** emerged highlighting some clear benefits to core content teachers, Spanish heritage language teachers, and other bilingual education-certified teachers who participated in the intervention program. A **first result** that emerged was that teachers' participation in the PD intervention program's knowledge and skills acquisition modules emphasizing current knowledge and best practices regarding how to properly understand and support the unique learning challenges of emergent bilingual learners led to teachers engaging in both individual and team-centered critical self-reflections on their own delimiting pedagogical thinking and ineffective instructional planning and teaching practices.

This self-reflective activity resulted in teachers acknowledging their previously unrecognized own *deficit pedagogical mindsets* regarding the academic learning capabilities and motivation levels of the immigrant/emergent bilingual (EB) and other diverse students populating their classrooms and committing as grade-level teams to reinventing and revitalizing their instructional planning and teaching practices. A **second result** that emerged from teachers' active involvement in the immersive learning "dual language, interdisciplinary instructional unit development" project activities during Week Two of the PD intervention program was that teachers began to gain a hands-on understanding of the value of *authentic data teaming* for turbocharging their overall PLC team instructional planning. Specifically, teachers developed new insights into the multiple improvements to their instructional practice that can be realized by: 1) intentionally engaging in purposeful "deep data digs" to systematically analyze students' learning assessment data; and then 2) leveraging the results of those data analyses to directly inform teachers' *biliteracy, interdisciplinary instructional planning*. A **third result** of the intervention program implementation was that teachers' active involvement in the intervention program's immersive project-based learning activities (Week Two) and follow-up observation/coaching and collegial mentoring cycles (Weeks Three through Five) enabled teachers across ninth through twelfth grades to gain critical *application experience* in learning how to directly apply and integrate important instructional concepts and strategies from the bilingual teaching and learning literature into their respective grade-level team's dual language, interdisciplinary instructional team planning and classroom teaching practices.

The above Guadalupe Hidalgo ECHS intervention program results led to the articulation of some broad-based **design research findings** associated with the conduct of targeted instructional improvement in high-diversity secondary school settings. A **first finding** emerging from the Guadalupe Hidalgo East Central High School case study results was that *immersive team learning*—i.e., teachers' active participation in grade level team-centered "hands-on, project-based biliteracy, interdisciplinary instructional unit development" activities followed by applied "test run" delivery of these interdisciplinary instructional units during teachers' regular classroom teaching time supported by intensive classroom observation/peer coaching and collegial mentoring cycles engaged in by educator "co-partner teams"—can be an especially useful "collaborative learning technique" for enacting meaningful instructional improvement in secondary school settings. Specifically, this type of *immersive team learning* intervention design approach can: 1) change educators' perceptions regarding the effectiveness of integrating "dual language writing development strategies" as a key component of biliteracy-anchored interdisciplinary instructional planning and teaching; and 2) incentivize grade-level teams of teachers to want to work collaboratively to incorporate multiple kinds of creative "genre-based writing development-intensive" peer-to-peer learning activities into their instructional unit planning to close the learning performance gaps for emergent bilingual and other diverse learners. A **second finding** emanating from the Guadalupe Hidalgo East Central High School case study results was that *design-based interventionist methodologies* can be powerful tools that change agent leaders working in high-diversity secondary school settings can employ to redirect teachers' pedagogical thinking and change and revitalize teachers' team-centered instructional planning and teaching practices. Targeted instructional improvement intervention programs—like the one developed and implemented by the educator design team in the Guadalupe Hidalgo ECHS case study—can help teachers learn how to creatively structure and implement data analysis-informed dual language, interdisciplinary instructional units that can meaningfully address the unique biliteracy academic learning development support needs of emergent bilingual and other diverse student populations.

These collective results and findings emerging from the implementation of the Guadalupe Hidalgo East Central High School Instructional Improvement Intervention Program provided some positive evidence supporting the efficacy of embracing a *design-based intervention methodological approach* to enacting turnaround instructional improvement in high-diversity secondary school settings. A key value-added benefit of utilizing this kind of design-based intervention approach is that it empowers school change leaders working as collaborative data analysis teams to systematically investigate and address the *underlying root causes* of students' "surface-level" persistent learning deficiencies (such as the large learning disparities among emergent bilingual students in the Guadalupe Hidalgo ECHS case) through identifying and addressing educators' own often entrenched "deep-structural" problems of professional practice. In an effort to contribute to the expansion of effective instructional improvement across the school district, principal Trejos-Guerrera and his intervention team colleagues presented the results and findings generated from their Guadalupe Hidalgo ECHS PD intervention program implementation to Barrera-Guajardo Metropolitan School District leaders.

The Guadalupe Hidalgo ECHS PD intervention program was highlighted as a model “turnaround instructional improvement” approach that could potentially be adapted and utilized by other Barrera-Guajardo district- and campus-based instructional improvement leaders to address similar persistent biliteracy student-learning problems in elementary and secondary schools across the district.

Discussion

This section provides a literature-informed discussion of the expanded biliteracy-centered interdisciplinary learning opportunities for emergent bilingual students that resulted from the application of the multileveled data-analytic procedures and design-based school improvement interventionist methods utilized by the change agent leaders in the Guadalupe Hidalgo East Central High School case study profiled above. The section is divided into two sub-sections addressing how campus-based leaders can enact turnaround instructional improvement for emergent bilingual learners on their campuses through: 1) utilizing writing development-intensive dual language project learning strategies to enhance the effective biliteracy, interdisciplinary academic learning of emergent bilingual students; and 2) leveraging the power of data teaming in tandem with design-based interventionist methodologies to revitalize teachers’ professional learning in high-diversity school districts serving large populations of multilingual learners.

Utilizing Dual Language–Anchored Interdisciplinary Writing Development as a Transformative Instructional Strategy for Enhancing the Effective Biliteracy Academic Learning of Emergent Bilingual Students

The Guadalupe Hidalgo East Central High School (ECHS) Case Study summarized and discussed above highlights the unique challenges confronting instructional improvement leaders tasked with enacting meaningful instructional improvement in high-diversity secondary school settings involving large populations of emergent bilingual learners. The particular Guadalupe Hidalgo ECHS instructional improvement challenges, moreover, are situated in a wider Barrera Guajardo Metropolitan School District *high-diversity community environment*, where in recent years district leaders have had to grapple increasingly with a wide range of cascading instructional program delivery effectiveness issues. These issues have centered on the substantive challenges involved in designing and integrating high-quality, rigorous English as a Second Language (ESL) and dual-language learning programs into their elementary and middle school curricula—programs that can adequately support the biliteracy academic development needs of the district’s large (and growing) populations of Hispanic emergent bilingual learners. The limited success of the district’s dual-language learning programs at the elementary and middle school levels has been particularly concerning to district leaders as dual language–learning students who have passed through these elementary and middle school ESL programs often encounter a *bottleneck in their learning progress* in terms of their increasingly diminished ability to demonstrate meaningful iterative learning performance gains across the core content areas as they enter and navigate through successive grades in high school. As a result, these emergent bilingual students (with Spanish as their native home language) often struggle with being able to comprehend and internalize critical academic concepts and principles within and across the core content areas (i.e., language arts, math, science, and social studies) at the secondary school level in ways that can keep pace with their native English–speaking peers. Notably, the persistent learning gaps displayed by these emergent bilingual (EB) learners present particularly knotty instructional planning and classroom teaching challenges for high school core content area teachers who become frustrated with their EB students’ lack of learning progress in ninth through twelfth grades. Educators’ mounting frustrations with this perplexing situation lead many high school teachers to develop negative attitudes and entrenched deficit pedagogical thinking mindsets about what these teachers perceive as the “limited learning capabilities” of their emergent bilingual students. Driven by these internalized negative perceptions, teachers then tend to minimize their grade-level team instructional planning efforts in ways that do not actively address the specific learning support needs of their EB students. Thus, in the Guadalupe Hidalgo ECHS Case Study principal Trejos-Guerrera and his instructional improvement colleagues had to find creative ways to address both the surface-level EB student-learning performance gap problem and the underlying root-causal professional learning problem associated with teams of grade-level teachers’ own deficit pedagogical thinking and insufficient instructional planning efforts in response to the unique learning development and support needs of the campus’s large emergent bilingual student population. The successful results that principal Trejos-Guerrera and his team were able to achieve with their instructional improvement intervention program implementation efforts were due to the fact that their intervention program design was anchored squarely in the literature-supported recognition of the power of utilizing interdisciplinary writing development as a *critical transformative tool* for addressing EB students’ academic learning challenges.

Through incorporating a progressive series of dual language development knowledge acquisition modules accompanied by iterative sets of hands-on data teaming and biliteracy interdisciplinary unit design and peer coaching and collegial mentoring opportunities into their intervention program, principal Trejos-Guerrera and his intervention design colleagues were able to provide teams of grade-level teachers participating in the Guadalupe Hidalgo ECHS Instructional Improvement Intervention Program with a transformative professional learning experience. This collaborative, team-centered *immersive learning* experience enabled teachers to critically examine and successfully change their own entrenched pedagogical beliefs and delimiting instructional planning and teaching practices that were to a large extent serving as *underlying root causes* contributing to and fueling their EB students' high classroom disengagement and low learning interest levels. Teachers' collective participation in and navigation through the five-week intervention program's iterative series of new knowledge acquisition modules and hands-on applied learning project activities enabled teachers to internalize new understandings regarding the demonstrable effectiveness of utilizing intensive *dual language–anchored, genre-based writing development across the content areas* as a powerful instructional design strategy and set of bilingual peer-interactive learning tools that teachers could integrate directly into their interdisciplinary instructional unit planning to invigorate the classroom-based biliteracy academic learning of their emergent bilingual students.

The decision by the intervention program design team to incorporate into both the “knowledge and skills acquisition” modules and grade-level teacher team “interdisciplinary instructional unit project development” activities a targeted focus on building teachers' capacities in bilingual, *genre-based* writing development proved to be especially useful. This specific design component focused on building teachers' capacities in learning how to incorporate *dual language–centered, genre-based writing development* into their grade-level PLC team interdisciplinary planning. The intent of this professional learning design component was to assist teachers in learning how to create scaffolded, genre-based “interdisciplinary-immersive” lessons that provided students with targeted opportunities to develop and refine both their native heritage language (Spanish) and their second acquisition language (English) literacy skills through engaging in reciprocal, multiple content–infused interdisciplinary learning. The particular emphasis on *genre-based* writing development (i.e., which involved expanding students' direct immersion in the processes of dual language learning through participation in a variety of collaborative “creative writing” activities, such as: expository writing, short story–telling, student-led play productions, picture-book and video-book narrations, poems, investigative journaling, field trip reporting, interactive dialogues and conversational writing, and the like) was a particularly useful instructional planning strategy that allowed teachers to design multiple “scaffolded” and “peer-to-peer–interactive” rich learning experiences within which native Spanish–speaking and native English–speaking students could learn from each other. The multiple dividends that could accrue to both students and teachers through grade-level teacher teams working actively to incorporate *genre-based writing development strategies* as a central component of an overall “immersive peer-to-peer student-learning approach” into their grade-level team instructional unit planning was emphasized repeatedly to teachers throughout the course of the Guadalupe Hidalgo ECHS five-week professional learning intervention program. Moreover, this active utilization of *dual language–immersive, genre-based writing development* as a critical instructional design strategy in interdisciplinary unit planning and classroom teaching is cited in the bilingual learning literature as a prime example of the kinds of powerful “translanguaging pedagogical strategies” that teachers can use every day to make academic content and language more comprehensible to emergent bilingual students (Garcia et al., 2017). The employment of translanguaging pedagogical strategies such as bilingual, genre-based writing development in interdisciplinary unit planning and teaching can help students integrate their existing knowledge and language practices with those that are expected of them as they navigate through core content area learning in school. Within the overall context of dual-language academic learning, the intentional integration of “translanguaging pedagogical strategies” such as *bilingual, genre-based writing development* into the bilingual interdisciplinary curriculum can positively support the pedagogical purposes of trans-language learning and help accelerate emergent bilingual students' opportunities to develop cross-language understandings of core curricular content and enhance their biliteracy learning. These overarching “trans-language learning purposes” include: 1) supporting students as they engage with and comprehend complex content and texts; 2) providing opportunities for students to develop both oral and written linguistic practices for academic contexts; 3) making space for students' bilingualism and ways of knowing; and 4) supporting students' socioemotional development and bilingual identities. (Garcia et al., 2017, pp. 75-77)

Finally, the results and findings affirming the positive biliteracy learning impact on emergent bilingual students of integrating *bilingual, genre-based writing development* into the interdisciplinary core curriculum that emerged from the Guadalupe Hidalgo ECHS intervention program implementation effort are consistent with and confirm key empirical research-based dual language learning concepts and principles espoused in the recent bilingualism literature. Bilingualism scholars contributing to the empirical research and instructional effectiveness literatures on biliteracy development are in widespread agreement that a robust “dual language–anchored transformative pedagogy” that is genuinely focused on supporting the effective biliteracy academic development of emergent bilingual learners is both *participatory and experiential* and *academically rigorous*. As Bigelow and coauthors state: “[A transformative pedagogy must be] *participatory and experiential*. Whether through projects, role-playing, simulations, mock trials, or experiments, students need to be mentally and physically active. Students also must be stimulated to develop their capacity for democratic participation through questioning, challenging, decision making, and collaborative problem-solving. ...Curricula and classrooms oriented toward collaborative critical inquiry are also *academically rigorous*. When students write for real audiences, read books and articles about issues that really matter, and write about and discuss big ideas with compassion and intensity, ‘academics’ starts to breathe.” [Bigelow et al., 1994 as cited in Cummins, 2000]. Thus, the results and findings of the present Guadalupe Hidalgo ECHS intervention program highlighted in this case study report can be seen to provide some “positive implementation evidence” further supporting the value-added contribution of the intentional integration of bilingual, genre-based writing development into the secondary curriculum as a critically important *translanguaging pedagogical strategy* for expanding and enhancing the effective biliteracy, interdisciplinary academic learning of emergent bilingual students.

Leveraging the Power of Data Teaming in Tandem with Design-Based Interventionist Methodologies as Change Agent Mechanisms for Revitalizing Teachers’ Professional Learning in High-Diversity School Districts Serving Large Populations of Multilingual Learners

The educational design research literature highlights a number of key characteristics of the *design-based school improvement approach* that makes it an especially useful practitioner-oriented methodology for investigating and addressing persistent, seemingly intractable learning problems in schools and school districts. Based on the collective empirical insights of a number of educational design researchers (Cobb et al., 2003; Kelly, 2003, 2010; Reeves et al., 2005; van den Akker, 1999; van den Akker et al., 1999; van den Akker et al., 2006a), design-based school improvement and the kinds of design-based, targeted intervention programs that school change agent leaders can develop and implement using this approach are: 1) *interventionist* – the research aims at designing an intervention in the real world; 2) *iterative* – the research incorporates a cyclic approach of design, evaluation, and revision; 3) *process focused* – a black box model of input-output measurement is avoided, the focus is on understanding and improving interventions; 4) *utility oriented* – the merit of a design is measured, in part, by its practicality for users in real contexts; and 5) *theory grounded* – the design is (at least partly) based upon theoretical propositions, and field testing of the design contributes to theory building (van den Akker et al., 2006a, p. 5).

In the high-diversity metropolitan high school case study context in which the campus principal and his investigative team were working to address the persistent, spiraling academic learning performance deficiencies of the campus’s large population of emergent bilingual students, principal Trejos-Guerrera and his colleagues utilized intensive data teaming in tandem with design-based interventionist program development and implementation methodologies as an *integrated change agency approach* to jumpstarting and revitalizing campus teachers’ professional learning. This integrated change agency approach involved a number of critical iterative steps. First, as part of their systematic efforts to address Guadalupe Hidalgo East Central High School’s persistent student-learning problem involving the low academic learning performance of the campus’s large population of Hispanic emergent bilingual students, principal Trejos-Guerrera and his investigative team engaged in a comprehensive analysis of their campus’s multi-year student learning performance data in conjunction with extensive observations of teachers’ grade-level professional learning community (PLC) instructional planning meetings that included a follow-up series of informal interviews with multiple teachers across grade levels. These initial investigative actions were taken to probe possible key factors and underlying root causes that could be fueling the emergent bilingual student population’s persistent learning performance deficiencies problem on their campus.

Principal Trejos-Guerrera and his team's collective analyses of relevant student-learning assessment data in conjunction with observational and interview data yielded a number of intriguing macro-level and micro-level insights that assisted the investigative team in identifying what could be viewed as the data analysis-informed *underlying root causes* of Guadalupe Hidalgo East Central High School's surface-level persistent student-learning performance problem. The *macro-level insights* that emerged from the team's analyses involved developing a more data-informed understanding of the extent and depth of teachers' entrenched negative pedagogical beliefs and attitudes regarding their perceptions of the learning capabilities of the emergent bilingual students in their classrooms and teachers' resulting self-limiting and ineffective instructional planning practices that did not include any robust efforts to address the unique biliteracy learning support needs of their emergent bilingual students. The *micro-level insights* that were generated as a result of the team's investigative work included some important data-informed revelations regarding both student learning performance and teacher team instructional planning across all grade levels at Guadalupe Hidalgo East Central High School. These data-informed micro-level insights centered on: 1) the low quality and inconsistency of students' writing performance both within and across core content areas; 2) the lack of any kind of systematic horizontal and vertical alignment of writing instruction across grade levels; 3) the fact that writing in Spanish is not prioritized by teachers as a recognized instructional strategy for supporting the biliteracy learning development of emergent bilingual students; 4) teachers' lack of professional training in genre-based writing, including their minimal training on how to effectively scaffold genres across languages; and 5) teachers' failures in utilizing grade-level team planning meetings as opportunities to use targeted performance assessments and rubrics to critically analyze students' writing in order to develop writing development-integrated interdisciplinary instructional units that can adequately support the biliteracy academic learning of emergent bilingual students.

Second, principal Trejos-Guerrera and his investigative colleagues then tapped into the power of design-based intervention program development and implementation as the methodology of choice to address the identified underlying, root causal professional learning deficits of the campus's teachers. This involved the detailed process of designing a targeted *instructional improvement intervention program* that consisted of: 1) opportunities for teachers to participate in literature-informed new knowledge acquisition modules; followed by 2) teachers' active involvement in hands-on, immersive project learning experiences. Within these project learning activities teachers engaged as grade-level teams in developing and delivering dual language-anchored, interdisciplinary instructional units in their classrooms supplemented with teachers' own collaborative involvement in peer observation/coaching and collegial mentoring cycles as an integral part of bilingual, interdisciplinary instructional unit classroom delivery activities. A unique structural feature of the Guadalupe Hidalgo East Central High School's Instructional Improvement Intervention Program "Implementation Plan" as designed and implemented by principal Trejos-Guerrera and his team involved capitalizing on the power of *educator collaboration* as a prime motivator of teachers' transformative professional learning. Opportunities for both structured and informal teacher collaboration were, in fact, a prominent design feature of the intervention program's overall "critical self-reflection and professional learning" process. Multiple opportunities for teachers to engage directly in immersive, grade-level team-centered collaborative learning were incorporated into each of the iterative sets of professional development (PD) modules and integrated throughout the five-week professional learning program. This active integration of *educator collaboration* as a key component of well-conceived "design-based intervention programs" is recognized in the literature on educational design research. As design-based researchers Susan McKenney, Nienke Nieveen, and Jan van den Akker emphasize: "If design research activities are to contribute to the professional development of participants, then design and development must be conducted in *collaboration with* and not *for* those involved. Additionally, data collection procedures should be mutually beneficial—addressing research needs while simultaneously offering meaningful experiences for the participants. Data collection methods such as interviews, walk-throughs, discussions, observations, and logbooks can be structured to stimulate dialogue, reflection, or engagement among participants." (McKenney et al., 2006, p. 77)

Incorporating educator collaboration as a key design component of instructional improvement interventions also has the additional advantage of incentivizing educator participants to engage in a variety of meaningful *data teaming activities* (e.g., conducting deep data digs into students' formative learning assessment data; engaging in data-driven team discussions concerning the results of those learning assessments to inform the development of individual student and student group-specific learning interventions) that can contribute directly to building educators' *instructional expertise*.

Indeed, providing multiple opportunities for educators to immerse themselves in differentiated analyses of student learning performance data as part of their overall intensive grade-level “data teaming” practices with the objective of helping to expand and deepen teachers’ own instructional expertise can be seen as another critical design feature of well-crafted professional learning intervention programs. The reciprocal professional learning advantages of utilizing *educator collaboration* in combination with *expertise development* as complementary components in the design of targeted professional learning intervention programs for educators, in fact, are recognized by researchers in the educational design literature. Susan McKenney and Thomas Reeves, for example, in their discussion of the usefulness of design-based interventions, make the following assertions regarding the “practical contributions” of engaging in educational design research: “The primary practical contribution of educational design research is the intervention developed to solve a real problem of practice. These interventions vary tremendously in scale, scope, type of intervention and field to which they are related. Interventions are primarily useful for the solution that they offer to a specific problem, but they can also be of value by setting a powerful or inspiring example. Another practical contribution of educational design research is the *development of expertise* [emphasis added] among project participants (e.g., researchers, teachers, administrators, other education professionals) ...that yield powerful insights for participants, fed by data and enhanced by the mutual exchange among educational researchers and practitioners.” (McKenney & Reeves, 2012, p. 39)

The strategic decision by principal Trejos-Guerrera and his investigative team to incorporate *active data-teaming* (both on the part of the intervention program designers themselves in developing the targeted intervention and the teachers participating in the five-week instructional improvement intervention program) and *immersive, collaboration-driven team learning* into the overall design of the Guadalupe Hidalgo East Central High School Instructional Improvement Intervention Program certainly proved to be two complementary change agent mechanisms that facilitated and supported teachers in positive ways as they engaged together in navigating through the five-week intervention program. The intentional pairing of active data-teaming with intensive, collaborative project-based learning—two components that were central to the overall design of the Guadalupe Hidalgo ECHS intervention program—was found to contribute meaningfully to providing a safe, non-judgmental environment within which teams of grade-level teachers could: 1) critically examine their own delimiting pedagogical beliefs and attitudes; and 2) work together purposefully to reconceptualize and transform their own team-centered instructional planning. This combination of active involvement in data-teaming along with immersion in project-based learning enabled grade-level teams of teachers to jumpstart genuine dual language–anchored, interdisciplinary instructional unit planning within their weekly PLC meetings and revitalize their classroom teaching practices in ways that could expand and enhance the biliteracy, cross-curricular academic learning of their campus’s emergent bilingual and other diverse students. For these reasons, the results and findings emerging from the Guadalupe Hidalgo East Central High School Case Study highlighted in this article report provide some encouraging positive evidence in support of the demonstrable “turnaround school improvement” advantages that can accrue to school leaders through utilizing multileveled organizational analysis in the form of intensive data-teaming in tandem with design-based intervention methodologies as powerful *change agency tools* for nurturing a robust culture of “transformative instructional improvement for multilingual learners” in high-diversity school districts.

Conclusion

The case study report summarized and discussed in this article examines the challenges school leaders face in high-diversity metropolitan school districts who are tasked with enacting turnaround instructional improvement to address the significant learning performance deficiencies involving the large populations of immigrant/emergent bilingual students populating their district’s campuses and classrooms. The particular metropolitan high school case examined in detail in this article highlighted how campus-based school leaders—who have been stymied in the past in adequately addressing the unique biliteracy academic learning support needs of emergent bilingual students by relying predominantly on traditional kinds of teacher staff development/instructional support mechanisms—can embrace the power of data teaming and design-based intervention program development strategies to proactively focus on and solve these entrenched, seemingly intractable learning improvement dilemmas.

Specifically, like the principal and his instructional improvement team in the Guadalupe Hidalgo East Central High School Case Study, change agent leaders working in similar high-diversity school and school district contexts can employ *campus-wide, multi-year student learning assessment review along with teacher observational and perspectivist data analysis techniques* in combination with *educational design research thinking* and associated *intervention program development and implementation strategies* as practical “design-based methodologies” to directly address the persistent dual-language instructional support challenges associated with the academic development of their district’s emergent bilingual learners and related diverse student populations.

The collective results and findings emerging from the Guadalupe Hidalgo East Central High School Case Study provided some strong positive evidence corroborating the practical usefulness of employing design-based research thinking and intervention program development methodologies as practical means for enacting effective turnaround instructional improvement in high-diversity secondary school settings. The intentional use of multileveled data teaming in tandem with the application of design-based thinking enabled the instructional improvement leaders working in the Guadalupe Hidalgo ECHS case situation to design, develop, and implement a targeted, literature-informed professional development (PD) intervention program that focused directly on: 1) assisting teachers in critically examining their own, often unintentional, entrenched negative beliefs and attitudes regarding the perceived academic learning capabilities of their emergent bilingual students; and 2) repositioning grade-level teams of educators to be able to reconceptualize and operationally expand *their own multilingual, interdisciplinary instructional team planning and classroom-based interactive teaching practices*. In this regard, the design-based turnaround instructional improvement methods and strategies highlighted in this case study report may be of use to change agent leaders working in a variety of similar high-diversity school district contexts who are interested in crafting *transformative, dual language-centered instructional improvement cultures* on their campuses and in their districts—learning cultures that can effectively support the biliteracy, interdisciplinary development needs of all linguistically and culturally diverse learners.

Acknowledgments

The author would like to acknowledge the unwavering dedication and team spirit of the school leaders and multiple groups of grade-level core content area teachers, Spanish heritage language teachers, and other bilingual education–certified teachers who participated in the collective multileveled data analysis and intervention program activities completed at this metropolitan high school. These educators’ enthusiastic participation in the multi-week intervention program designed and implemented by the campus’s instructional improvement leaders served to underscore the willingness of these grade-level teacher teams to push the boundaries of their own professional learning in a concerted effort to substantively expand biliteracy learning opportunities for their campus’s linguistically and culturally diverse learners.

Disclosure Statement

The author affirms that there were no relevant financial or non-financial interests involved in connection with the school improvement research activities completed for this article report.

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