

To cite this article: Joseph G. Claudet (2025). ENACTING TRANSFORMATIVE INSTRUCTIONAL IMPROVEMENT IN A HIGH DIVERSITY METROPOLITAN SCHOOL DISTRICT, International Journal of Education and Social Science Research (IJESSR) 8 (2): 315-359 Article No. 1052, Sub Id 1649

**ENACTING TRANSFORMATIVE INSTRUCTIONAL IMPROVEMENT IN A HIGH DIVERSITY METROPOLITAN SCHOOL DISTRICT:
A Design-Based Interventionist Methodology for Expanding Secondary Educators' Multilingual, Cross-Curricular Instructional Planning and Teaching Practices to Support Immigrant Emergent Bilingual and Other Diverse Learners**

Joseph G. Claudet, Ph.D.

Associate Professor of Educational Leadership
Department of Educational Psychology, Leadership, and Counseling
Texas Tech University
Box 41071 / College of Education
Lubbock, Texas 79409-1071 USA
voice: 806/789-6377
facsimile: 806/742-2179
Orcid iD: <https://orcid.org/0000-0001-7318-5542>

DOI : <https://doi.org/10.37500/IJESSR.2025.8223>

ABSTRACT

Addressing the unique social and academic learning development and support needs of the growing populations of immigrant students entering K-12 school districts in the United States within the past decade is an acute challenge currently facing instructional improvement leaders working in elementary and secondary campus settings. This article profiles how one high school principal and his instructional equity-centered intervention task force colleagues working in a high-diversity metropolitan school district leveraged the power of multileveled data analysis investigative techniques in conjunction with design-based intervention program development strategies anchored in the education improvement science literature to develop and implement a multi-week, immersive learning intervention program for multiple grade-level teams of core content area teachers, Spanish heritage language teachers, and other bilingual education-certified teachers. The immersive learning intervention program implemented by these change agent leaders focused on providing grade-level teams of teachers on their high school campus with structured opportunities to: 1) reexamine their own deficit thinking pedagogical mindsets and constrained instructional planning behaviors in response to the perceived learning capabilities of the culturally and linguistically diverse students in their classrooms through internalizing new literature-supported content knowledge and instructional planning strategies for addressing the unique social and academic development support needs of multilingual learners; and 2) directly apply the newly acquired multilingual instructional planning content knowledge and skills through engaging together in a series of multilingual, cross-curricular instructional unit planning project development and classroom implementation activities in conjunction with peer-to-peer observation/coaching and collegial mentoring cycles designed to enable teachers to refocus and revitalize their overall instructional teaming practices. The article concludes

with a literature-based discussion of how campus-based instructional leaders can utilize multileveled data analytic procedures in tandem with design-based intervention methods as powerful change agency tools for nurturing and sustaining a positive culture of transformative instructional improvement for multilingual learners in high-diversity school districts.

KEYWORDS: educational design research; multilingual learning; high diversity school districts; biliteracy instructional teaming

INTRODUCTION

Instructional leaders working in high-diversity K-12 school districts across the United States have been grappling for several years now with the daunting challenges associated with reducing and closing the academic achievement gaps plaguing their school districts resulting from the growing populations of immigrant/emergent bilingual learners and other culturally and linguistically diverse sub-groups of students populating their elementary and secondary classrooms. In particular, the dramatic increases in the arrival of immigrant families from Mexico and other Central American countries to border states in the southern and southwestern regions of the United States have presented school improvement leaders with new dilemmas on how to properly restructure their curricular programs and recalibrate their educator staff development/training efforts in meaningful ways that can assist teachers in reexamining their pedagogical thinking and reinventing their instructional planning and teaching practices to better serve the unique learning support needs of *culturally diverse, multilingual learners*.

In the United States during the past decade, states in the southwestern portion of the country—notably border states such as Texas, New Mexico, Arizona, and California in particular—have experienced continuing large increases in Hispanic student enrollments impacting the overall diversity of the student/family population groups being served by these states’ public-school districts. Large percentages of these student population surges have been due to increases in Hispanic families immigrating to the United States from Mexico and a number of Central American countries such as Belize, El Salvador, and Honduras who are seeking employment opportunities in the agricultural, industrial, and human services sectors in and around large metropolitan urban centers. In Texas, for example, total student enrollment in public schools over the most recent ten-year period between 2013-14 and 2023-24 increased by 379,311 students, or 7.4 percent. Across the five largest demographic groups (i.e., African American, Asian, Hispanic, White/non-Hispanic, and multiracial), Hispanic students accounted for the largest percentage of total enrollment in Texas public schools (53.2 percent) in the 2023-24 school year, followed by White/non-Hispanic students (25.0 percent), African American students (12.8 percent), Asian students (5.4 percent), and multiracial students (3.1 percent). In addition, between 2013-14 and 2023-24, the percentage increase in the number of students identified as economically disadvantaged (11.1 percent) was greater than the percentage increase in the student population overall (7.4 percent). Notably, during this same ten-year time period, the number of Texas students identified as emergent bilingual (EB) / English language (EL) students increased by 445,441, or 49.5 percent, between 2013-14 and 2023-24. In the 2023-24 school year, the percentage of students being served in Texas public

schools who were identified as emergent bilingual students / English language learners was 24.3 percent, compared to 17.5 percent of EB / EL students being served in 2013-14. During this same 2023-24 school year, 78.2 percent of all EB / EL students in Texas public schools participated in state-approved bilingual or English as a Second Language (ESL) instructional program models. ESL/pull-out programs (36.7 percent) and dual immersion/one-way programs (15.1 percent) were the most common special language program instructional models among EB / EL students receiving bilingual or ESL services in Texas public school districts. Moreover, of the total percentage of the Texas public school student population identified as Hispanic (53.2 percent) in 2023-24, 66.6 percent of these students were also identified as *academically at-risk* (note: multi-year student enrollment data summarized here was obtained from: Texas Education Agency *Enrollment in Texas Public Schools 2023-24 Report*, August 2024). The longitudinal student enrollment data trends noted in the Texas Education Agency's 2023-24 Report underscore the multiple curricular programming and instructional support dilemmas confronting Texas public school leaders working in a variety of school district settings (metropolitan/large urban centers, rural communities, etc.) who must navigate the daunting challenges associated with designing varied student assessment protocols and curricular programs and engaging in creative bilingual/multilingual instructional team planning efforts to address the unique multilingual social and academic learning support needs of the large numbers of immigrant/bilingual students populating Texas public school classrooms.

Campus and school district instructional improvement leaders (district curricular program directors, campus principals, assistant principals, department heads, instructional coaches, school counselors, instructional improvement interventionists, etc.) seeking to proactively address the real-world challenges associated with closing the academic achievement gap and providing meaningful learning support for their growing populations of immigrant/emergent bilingual students have turned in recent years to embracing *design-based school improvement intervention thinking* as a new kind of “multileveled data analysis and intervention design development model and operational process” to help reframe and revitalize their overall educator staff development/training and individual campus-specific instructional improvement efforts. Anchored in the improvement science literature within the fields of education and organizational development (Kelly, 2010; McKenney & Reeves, 2012; Plomp & Nieveen, 2010; van den Akker et al., 2006), *design-based school improvement methodology* has emerged within the past two decades as a method of choice for school change agent leaders working in a variety of elementary and secondary school contexts looking to leverage an innovative, practical means for proactively addressing and “turning around” the growing academic achievement gaps registered by their immigrant/emergent bilingual students and other diverse school sub-populations (e.g., the Hispanic student population sub-group and other culturally and linguistically diverse student groups in general) in comparison with other higher-performing student groups (e.g., the native born, Caucasian/White student population sub-group). In particular, school instructional improvement leaders can leverage and apply design-based improvement thinking and operational methods in their campus-specific contexts to engage collaboratively with their educator colleagues in multileveled student-learning assessment data mining and analysis in conjunction with qualitative investigative probing of educators' own pedagogical

mindsets and instructional team planning behaviors to identify and address the underlying root causes of diverse students' learning problems. Students' learning problems can certainly be traced, in part, to multiple factors associated with students' cultural and linguistic heritage and their home/family backgrounds and economic circumstances. However, intriguingly, some of the most alarming and persistent underlying root causes of students' learning problems (that certainly include the challenge of narrowing and closing the achievement gap for populations of immigrant/emergent bilingual students) and the ongoing learning difficulties that many of these diverse students face can often be traced directly to teachers' own pedagogical and instructional *deficit thinking* mindsets. Specifically, teachers—for the most part unconsciously and unintentionally—can often adopt narrow-visioned or even negative pedagogical beliefs (i.e., deficit thinking) and counterproductive instructional team planning and classroom teaching behaviors (i.e., ineffective professional teaching/learning practices) that are centered in teachers' own perceptions of the learning capabilities of the culturally and linguistically diverse students in their classrooms and the limited extent to which teachers feel they can realistically address the unique social and academic learning support needs of these diverse students (including immigrant/emergent bilingual learners) within their normal (already strained and teaching and learning accountability-intensive) weekly grade-level instructional team planning and classroom teaching routines.

Through applying design-based improvement analytic techniques, teams of school instructional improvement leaders can probe multiple kinds and levels of student and teacher data on their campuses to identify educators' underlying deficit thinking mindsets and behaviors and, importantly, leverage the results of these multileveled data analyses to inform the design of targeted intervention programs to directly address and change the pedagogical thinking and instructional team planning and teaching practices of groups of grade-level teachers. Importantly, school change agent leaders and their colleagues working together as *design-based instructional improvement teams* can develop and implement data-informed and instructional improvement literature-supported professional development (PD) immersive learning intervention programs on their campuses that can assist teachers in gaining exposure to up-to-date content knowledge and team-centered instructional planning skills and strategies that teachers can internalize and integrate directly into their grade-level team planning activities to more effectively support the specific academic learning needs (including multilingual learning development) of their diverse students. In writing about the practical application value of the design-based intervention methodology as an appropriate change agency tool for use by school improvement leaders, Tjeerd Plomp, a leading proponent of educational design research methods states: "Design research by its character aims to be practically relevant. It is initiated to design and develop innovative interventions to meet a need felt in a complex, practical situation for which no ready-made solutions or guidelines are available. Therefore, design researchers aim at developing interventions (such as programs, teaching-learning strategies and materials, products and systems) that can be used in practice and are empirically underpinned solutions to the problems identified. One of the key features of design research is the collaboration of researchers and practitioners. This collaboration increases the chance that the intervention will indeed become practical and relevant for the educational context which increases the

probability for a successful implementation. But the participation of practitioners should also be seen as an *important form of professional development* [emphasis added]. An extra spin-off may be that practitioners will develop an awareness of how research may contribute to improving their professional context.” (Plomp, 2010, p. 22)

The high school case study profiled in this article highlights how school leaders working in a high-diversity metropolitan school district setting can apply design-based thinking *methods* in conjunction with data analysis-supported intervention design development and implementation *operational strategies* to address teachers’ entrenched pedagogical “deficit thinking mindsets” and “self-limiting instructional planning behaviors” in ways that can transform and revitalize their instructional practices to be able to effectively serve the learning support needs of the culturally and linguistically diverse students in their classrooms.

PURPOSE

The purpose of this article is to demonstrate how school leaders working in high-diversity school districts who are interested in enacting meaningful deep-structural instructional improvement on their campuses can leverage the power of *design-based school improvement intervention methodologies* to directly address in very practical ways the unique academic development and instructional support needs of their continually expanding populations of culturally and linguistically diverse learners (such as: immigrant/emergent bilingual students and other culturally diverse student sub-populations). The metropolitan high school case study profiled in this article describes how one campus principal and his instructional task force (ITF) colleagues seeking to address the persistent academic learning gap challenges affecting the large population of diverse multilingual students on their campus applied design-based school improvement analytic thinking and interventionist development operational strategies to enact targeted “turnaround instructional improvement” on their campus. The multi-week professional development (PD) intervention program developed and implemented by the principal and his ITF colleagues in this metropolitan high school situation included professional learning modular opportunities for multiple teams of ninth through twelfth grade teachers on the campus (i.e., individual teacher teams consisting of selected groups of core content teachers, Spanish heritage language teachers, and other bilingual education-certified teachers within each grade level) to: 1) acquire new content knowledge and skills on multilingual instructional unit planning and teaching practices; and then 2) directly apply their newly acquired knowledge and skills through collaborating together within an iterative series of carefully structured “bilingual, interdisciplinary unit planning project development” activities and “peer-to-peer classroom observation and collegial mentoring cycle” experiences. The specific goal of the intervention program was to provide a carefully designed *immersive professional learning experience* for teams of educators within which teachers, when presented with up-to-date content knowledge and strategies from the current literature on multilingual learning, could reexamine their pedagogical mindsets and instructional planning behaviors and learn how to work together in new team-centered ways to address the particular academic learning support needs of the culturally and linguistically diverse students populating their high school classrooms. A detailed description of the sets

of multileveled data analysis procedures, instructional improvement literature review activities, and intervention program development and implementation efforts completed by the principal and his ITF colleagues along with a presentation and discussion of the results and findings emanating from teachers' participation in the intervention program are presented in the various sections of the case study report below.

RESEARCH METHODS

The *Design-Based School Improvement Logic Model and Operational Steps Process* developed by Rick Mintrop (2016) was used as the primary research methodology to guide the metropolitan high school turnaround instructional improvement efforts profiled in this article. Mintrop's analytic logic model and operational steps process represents a further refined application of the general design-based improvement research methodology described in the education improvement science literature (Kelly, 2010; McKenney & Reeves, 2012; Plomp & Nieveen, 2010; van den Akker et al., 2006).

School leaders working in a variety of organizational contexts can employ Mintrop's logic model and operational steps process to engage in multileveled analyses of relevant teaching and learning data and leverage the results of their data analyses to inform the development of literature-supported, *professional learning design-based* instructional improvement intervention programs—intervention programs that can directly target educators' knowledge and skills deficits and revitalize their team-centered instructional planning and classroom teaching practices. In a nutshell, Mintrop's *Design-Based School Improvement Logic Model and Operational Steps Process* consists of seven well-delineated operational steps as follows: Step One - generate an initial (*high inference*) Student-Learning Problem rationale statement along with an accompanying intuitive Theory of Action (If/Then) statement that reflects the apparent surface-level student-learning problem(s) currently existing in the school and/or school district; Step Two - conduct an in-depth Exploratory Needs Assessment (ENA) investigation through carefully examining multiple kinds of relevant data to identify surface-level student-learning problems and underlying root causes of those problems; Step 3 - develop a data-informed and school improvement literature-supported statement of the refined (*low inference*) Problem of Professional Practice existing in the school and/or school district; Step 4 - identify multiple contextual factors that could help explain *why* the student-learning performance problems and underlying root causes of those student-learning problems are persisting in the school and district; Step 5 - conduct intensive reviews of relevant knowledge bases related to the campus or district's specific instructional improvement problems; Step 6 - generate a refined Theory of Action (If/Then) statement that delineates specific intervention strategies instructional leaders can implement to realize substantive improvements in teaching and learning performance on their campuses and in their district; and Step 7 - construct a Change Drivers Diagram and accompanying detailed Intervention Program Implementation Plan that provides a clear operational roadmap for how school and district leaders will apply key literature-supported intervention strategies to address the identified low-inference Problem of Professional Practice and transform and invigorate educators' instructional practice-centered professional learning. Through engaging in these seven iterative operational steps, school change agent leaders interested in addressing directly the often

multiple sets of improvement challenges confronting them and their educator colleagues at any given time in their context-specific school situations can intentionally: 1) *redefine* their “problem space” (i.e., how the educational problem or problems is/are framed or defined and represented in the problem solvers’ minds); and then as a result 2) *reconstruct* the “solution space” school leaders can work within (i.e., creatively expand the kinds of solution paths, operations, or intervention programs the problem solvers can choose to implement). In this regard, the design-based school improvement logic model and operational steps process espoused by Mintrop (2016) focuses explicitly on providing school change agent leaders with a very practical, analytically-driven set of procedural steps for accurately identifying data-informed “real world problems of practice” and constructing “solution-oriented interventionist programs” to address and solve those real-world problems.

The systematic *collaborative inquiry approach* articulated by Nancy Love (2009) was also employed in tandem with Mintrop’s design-based school improvement seven-step process to provide a further degree of granular detail to the “authentic data teaming” interventionist work engaged in by the school leaders profiled in the case situation presented and discussed in this article. According to Love (2009), data teams operating in elementary and secondary school contexts typically “collaborate together” in a number of discrete ways, including: 1) collecting and analyzing a variety of different types of school data; 2) developing or adapting multiple kinds of common assessment instruments; 3) committing to clear norms of collaboration and to examining data from an equity perspective; 4) identifying student-learning problems, verifying causes, generating solutions, and monitoring and achieving results for students; 5) consulting research to investigate problems, causes, and best practices; 6) developing data-supported action plans; 7) communicating with staff and key stakeholders about the findings and the improvement plans; 8) overseeing the implementation of the improvement plan (schoolwide or vertical team) and/or implementing instructional improvement in individual classrooms (grade-level, course, or subject teams); and 9) coordinating with school leaders at all campus and district levels to further develop educators’ data literacy and collaborative inquiry knowledge and skills; content knowledge, generic pedagogical knowledge, and specific pedagogical content knowledge; cultural proficiency; and team leadership and facilitation skills. (Love, 2009, p. 39) Key elements of the *collaborative inquiry approach* developed and operationalized by Nancy Love were consolidated into a streamlined conceptualization of “authentic data teaming” that was utilized as part of the overall design-based intervention program development and implementation methods employed by the school improvement leaders in the case study profiled in this article report.

The metropolitan high school case study presented below provides a summary description of how Mintrop’s (2016) *Design-Based School Improvement Logic Model and Operational Steps Process* in conjunction with “authentic data teaming” principles and practices based on Nancy Love’s (2009) data teaming-centered *collaborative inquiry approach* were utilized in tandem as *change agency tools* by the case study’s high school principal and his intervention task force colleagues to enact substantive instructional improvement in their high-diversity metropolitan high school context. Together, these two complementary methods were operationally applied by the high school principal and his colleagues to

engage in multileveled analyses of their campus's student learning and teacher instructional teaming data to: 1) reframe and rearticulate their school's improvement challenges away from focusing solely on how to deal with a *surface-structure* "student-learning problem" associated with closing the achievement gap for populations of diverse learners to identifying an underlying, data-supported *root-causal* "problem of professional practice" involving the campus's instructional staff; and 2) develop and implement a carefully structured literature-supported and design-based *immersive learning intervention program* for campus educators that held promise for redirecting and rejuvenating in practical ways teachers' own team-centered multilingual instructional planning and classroom teaching practices.

METROPOLITAN HIGH SCHOOL CASE STUDY

Background

Javier Enrique Becerra, a proud professional educator with a Hispanic (Mexican) cultural heritage and family background, is a first-generation college graduate and the only sibling among his brothers and sisters to attain an advanced college level of education within his immediate family. Becerra grew up experiencing first-hand the challenges and difficulties involved in learning English (second language acquisition), as his family's home speaking language was Mexican Spanish. Reflecting back on his youth, Becerra recalled always having an intensive curiosity for and passionate interest in science – both the science of living things (biology and botany) and the science of motion and movement (physics and math). As a young boy growing up in a Hispanic family whose only home language was Spanish, Becerra was determined to learn English. Becerra realized early on that learning the English language (both academically and socially) would be necessary for him to be able to succeed in school in the United States and pursue his dream of exploring the world of science learning. With dogged determination to succeed no matter what the effort that was required, Becerra bootstrapped his own multilingual learning, forcing himself to learn English to keep up with his native English-speaking peers in elementary school on the Texas-Mexico border. Becerra's efforts paid off and he became the first sibling in his Hispanic family to attend college and earn a degree in science education. When he became a middle school science teacher in a small rural school district in the southwest Texas border community of Del Rio after graduating from college, Becerra was determined to provide his students, the vast majority of whom were struggling native Spanish-speaking learners from Hispanic speaking families just like his own, with dual language immersion experiences to facilitate and expand their bilingual academic and social language development to help these students navigate through and succeed in learning the US education curriculum. As a result of his sustained efforts in contextualizing his classroom instruction to meet the needs of his dual language students, Becerra earned the respect of his teacher colleagues and district administrators. When the long-serving principal at his middle school campus announced his retirement, Becerra was tapped by the school district's superintendent and confirmed by the district's school board to serve as the middle school's next principal. During his time as principal at this middle school, Becerra instituted an array of curricular and pedagogical reforms that focused on providing teachers with the bilingualism conceptual understandings and instructional strategies teachers needed to plan and implement authentic, *dual language-sensitive*

lessons and interdisciplinary learning units to fully support students' bilingual social development and instructional support needs.

Principal Becerra's successes as an innovative instructional leader at his middle school campus quickly became recognized and solidified his notoriety as a strong instructional leader who understood the needs of diverse learners. Most importantly, Becerra became known both within his district and in the state as an instructional leader who: 1) possessed a clear vision for bilingual teaching and learning; and 2) excelled at sharing practical ideas on how to implement district curricula through coaching teachers on how to craft interactive classroom learning environments that could positively benefit the academic and social developmental support needs of diverse emergent bilingual learners. In particular, Becerra gained influence in his district and beyond as a gifted leader who could model and guide teachers—both groups of teachers in grade-level teams as well as teachers working together in cross grade-level teaming configurations—on how to effectively employ immersive learning methods (i.e., peer-learning pedagogical techniques) that tapped into diverse students' natural inclinations to explore and learn in groups and to collaboratively learn from their peers. Becerra's instructional coaching strategies also included assisting teams of teachers in learning how to integrate the complementary pedagogical techniques of *instructional scaffolding* and *cultural transference* into their classroom lesson and unit planning to enable students to better grasp new concepts and principles through incrementally “scaffolding” students' learning through helping students gradually build up their understandings of new concepts in small bits or steps that would leverage students' own cultural and linguistic backgrounds as creative ways to anchor new ideas and principles in students' minds. After firmly grasping new academic concepts using their own native language and linking these concepts to ideas readily familiar to students from their own native cultural backgrounds and home experiences, students would then be better prepared to be able to engage in the mental processes of transferring the newly learned concepts from their native language (i.e., Spanish) to their second acquisition language (i.e., English).

After serving as principal of this border community middle school for three years, Becerra was recruited by a much larger school district in central Texas to assume the position of principal of the largest of the district's five high school campuses. This large school district is situated in a metropolitan urban center that serves as the health, education, and economic and financial services hub for a large swath of the central Texas region as well as operating as an influential industrial and information technologies innovation center for the entire southwestern United States. Whereas the diversity footprint in Becerra's small border community school district was much smaller (i.e., 65 percent Hispanic students; 35 percent working class white students) characterized primarily by Mexican families who have immigrated over recent decades to the United States and have settled along the Texas/Mexico border, as well as by sizeable influxes of native Spanish-speaking Mexican students, many of whom would commute on a daily basis across the border from Mexico to attend American school during the day, the large metropolitan school district that Becerra was now joining exhibited a much broader student and family diversity footprint, with many of the district's native Spanish-

speaking students immigrating to the United States from multiple Central American countries, including Belize, Honduras, and San Salvador. These immigrant families and their school-age children were attracted to large metropolitan urban centers in the United States in the hope of finding gainful employment in the large human services sectors associated with booming urban environments, including the food and entertainment, hospitality, and domestic services industries. In addition, many of the adult immigrants from these Central American countries were drawn to these urban areas in the United States because of the opportunities for work in the agricultural farmlands surrounding many of these metropolitan centers.

Eager to continue to expand and further refine his instructional leadership abilities and to apply his bilingual education-centered instructional leadership techniques in even more diverse settings, Javier Becerra accepted the offer from superintendent Dr. Armando Guerrero and the district school board to become the new principal of Marroquin East High School in Marroquin-Seguro School District for the 2022-2023 school year. During his principal job interview meetings as well as during the early summer of 2022 after he had accepted the job offer and was formally approved by the district's school board for the position, superintendent Guerrero and other members of the district's executive leadership cabinet explained to Becerra that he would be assuming the leadership helm of the district's largest high school with over 5,500 students. Over the last ten years, population demographics in this urban center have continued to trend heavily toward a "minority-majority" population base (Hispanic population majority), with Hispanic students enrolled in the district now exceeding the state's average of 52 percent. The most recent available district demographic data (data from the previous 2021-2022 school year) had placed the high school's student population figures at 58 percent Hispanic, 21 percent African American, 13 percent Anglo, 6 percent Asian American, and 2 percent other. However, the Marroquin-Seguro School District—like many urban districts in Texas—has continued to lag behind in diversifying its teaching staff, with the district's professional certificated personnel consisting of a largely Anglo (white), non-Spanish speaking teaching staff who comprise 89.5 percent of the teachers and administrators in the district, while Hispanic teaching staff only make up 8.6 percent of the total staff. While some stakeholders in the district would contend that this lack of diversity in the teaching staff is not a problem, many of the district's campus-based and district office instructional leaders realize all too well that this lack of diversity in the district's teaching staff has led to unconscious biases and lack of cultural sensitivity in serving the needs of the district's large populations of Hispanic students and families. Moreover, the state's multi-year learning accountability performance data for the district clearly highlight a substantial learning performance gap between Hispanic and non-Hispanic students in multiple learning performance metrics. These learning performance disparities between Hispanic and non-Hispanic students are particularly apparent in the Texas Academic Performance Report (TAPR) indicator focused on College and Career Readiness, the Texas Success Initiative (TSI) assessments of students' learning progress in the areas of English Language Arts / Reading and mathematics, student Dual Credit Enrollment (i.e., high school-age students enrolled in college-level courses for dual credit as a preparation for college / university learning), the Advanced

Placement (AP) Course enrollment, and students' scores on the American College Testing (ACT) and Scholastic Aptitude Test (SAT) college-readiness tests.

Case Study: Instructional Turnaround Leadership for Multilingual Learners at Marroquin East High School

Initial Framing of Marroquin East High School's Student-Learning Problem

To prepare for his new principal assignment at Marroquin East High School for the 2022-2023 school year, principal Becerra spent time in June 2022 carefully reviewing Marroquin East High School's cumulative student-learning performance scores across all student population groups for the campus over the past three years. Based on his careful review of all available data and bolstered by the strong directive he had been given from superintendent Guerrero to feel free to implement any needed reform initiatives he felt were needed to realize positive instructional improvement—particularly for the large populations of Hispanic students, including the particularly large population of emergent bilingual (EB) learners on the district's largest high school campus, Javier Becerra was able to formulate what he perceived to be the **initial (high inference) “student-learning problem”** at Marroquin East High School he was hired to address. Becerra articulated this initial student-learning problem for Marroquin East High School as follows: *Student learning at Marroquin East High School, as measured by students' performance on state-mandated core content area End-of-Course (EoC) exams and other standardized assessments, has continued to decline from year to year at unacceptable rates. Moreover, the learning performance gap between Hispanic students on this campus and non-Hispanic students (White/Caucasian students, Asian-American students) as measured by state academic learning assessments across all major content areas continues to expand. In addition, multi-year, cumulative assessment data for the specific sub-group of Hispanic students categorized as Emergent Bilingual (EB) students provided concrete evidence that many of these students have plateaued and have reached a ceiling in their learning progress—that is, they have become “stagnant” or “frozen” in their learning performance growth on English language proficiency assessments and on core content area learning accountability measures. As expected, overall graduation rates for these populations of Hispanic emergent bilingual students are significantly lower in comparison with other Marroquin-Seguro Metropolitan School District student populations. As a result, Marroquin East High School's instructional leaders need to focus on addressing the campus's urgent student-learning improvement need area of closing the learning performance gaps (in comparison with other student populations) of Hispanic students—i.e., EB students' (i.e., immigrant/Hispanic native-speaking students') bilingual learning in particular, as well as Hispanic student populations in general—in the core content areas (English/language arts, math, science, and social studies) that are assessed by the state's education agency. Following from this student-learning problem logic, principal Becerra was able to identify the immediate “turnaround leadership challenge” that he felt was at the core of Marroquin East High School's student learning improvement dilemma: How do I provide Marroquin East High School's core content area teachers, Spanish heritage language teachers, and other teaching staff with the targeted professional development (PD) and complementary ongoing instructional coaching support they need to be able to understand and internalize principles and practices of authentic data teaming to be able to engage*

together in effective multilingual team planning to design and deliver fully differentiated cross-curricular (i.e., multi-disciplinary) instructional units to meet the biliteracy learning support needs of the campus's large and continually growing populations of Hispanic and immigrant/emergent bilingual (i.e., native Spanish speaking and English language learning) students? To put his change agent leadership thinking in practical operational terms, principal Becerra then formulated the following **intuitive If/Then operational statement** to guide his turnaround improvement actions: *If my assistant principals, instructional coaches, and I work proactively to design and provide 'authentic data teaming PD' and 'bilingual instructional team coaching support' to teachers, then core content area teachers, Spanish heritage language teachers, and other instructional staff at Marroquin East High School will learn how to work together in their weekly grade-level professional learning community (PLC) meetings to plan and implement fully differentiated 'multi-lingual and cross-curricular instructional units and associated interactive learning activities' that can effectively address the biliteracy learning development and overall academic and social support needs of the campus's large populations of Hispanic and emergent bilingual students.*

Armed with his own data-informed analysis of the campus's "student-learning problem" and an intuitive understanding of the kinds of instructional turnaround strategies that would need to be implemented to enact demonstrable learning improvement at Marroquin East High School, principal Becerra set up a series of meetings with department chairs and grade-level team leaders at the beginning of the 2022-2023 school year in August to learn as much as possible about the campus and his new instructional staff and to glean insights on the challenges and opportunities groups of teachers in each core content area (science, mathematics, English language arts / reading, social studies) were facing in serving the instructional learning and support needs of the diverse array of students attending Marroquin East High School. Following this series of initial meetings with department and grade-level instructional leaders, Becerra immediately began regularly attending teachers' department and grade-level team meetings across ninth through twelfth grades to begin sharing the sets of pedagogical techniques and instructional strategies for supporting the emergent bilingual (native Spanish speaking and emergent English acquiring) social and academic learning development needs of native Mexican students he had implemented so successfully as a principal in his previous small Texas/Mexico border community middle school setting. However, much to Becerra's surprise, the polite reception from the high school instructional staff he had received in July and August of 2022 on his arrival at the school began to quickly turn sour as teachers both within and across multiple grade levels began to chafe at his suggestions about directly incorporating "immersive learning methods" (i.e., peer-learning pedagogical techniques) into teachers' instructional unit plans to provide multiple opportunities for students to tap into their natural inclinations to explore together in groups and to collaboratively learn from their peers. In addition, many of the veteran teachers at this high school balked at Becerra's recommendations that they work in their grade-level planning teams to integrate the complementary pedagogical techniques of *instructional scaffolding* and *cultural transference*—techniques that had worked so well for Becerra in his own teaching as well as in his instructional coaching of other teachers in his former border community school setting—into their classroom lesson and unit planning as

intentional ways to help their English as a Second Language (ESL) and emergent bilingual (EB) students better grasp new curricular concepts and principles through incrementally “scaffolding” students’ learning to build deep understandings in both students’ native and second acquisition languages.

By the end of the first nine weeks of the 2022-2023 school year, Becerra began to realize that his hopes for implementing his well-honed instructional strategies for supporting the learning development needs of emergent bilingual students that had worked so well in his former border school setting were unrealistic. Indeed, Becerra was not prepared for the severe backlash of negative reactions he received from teachers—many of whom were veteran teachers who have been working at this school for fifteen or more years—who began to pointedly criticize his active instructional oversight approach to working with teachers at this high school and to insinuating that he was more knowledgeable than the teachers themselves on how to instructionally plan to support the learning needs of their particular students. Some of the more vocal teachers did not hold back in reacting robustly to principal Becerra’s instructional planning recommendations during their weekly grade-level team meetings. As one example of the pushback he began to receive from teachers across the campus, one veteran Algebra I and II math teacher made the following comments to principal Becerra while he was attending their grade-level instructional planning meeting in early October 2022: *We respect the fact that you have a good deal of experience in implementing the bilingual education instructional strategies you talk about in small rural border community settings, and these strategies may work in smaller communities with more manageable student and family diversity demographics. But your pedagogical techniques and instructional planning ideas simply won’t work in our classrooms. This is a highly diverse metropolitan high school campus! We have immigrant students sitting in our classrooms from multiple Central American countries who have been in the district for several years and have participated each year in the district’s dual language programs and still cannot handle academic vocabulary in English at even an elementary (fifth and sixth grade) level. When I’m trying to teach important Algebra concepts to my class of students, I routinely am interrupted by groups of these Central American immigrant students who are talking and laughing among themselves. For all I know, they could be making fun of me. I and my other teacher colleagues are being held accountable for preparing students to succeed on the state’s Exit Exams in mathematics and other core content areas, and we simply don’t have the time nor the endless amount of patience needed to deal with these students. This sentiment was echoed by a tenth-grade science teacher who explained the problem with teaching these emergent bilingual students as one of family and cultural background: Don’t get me wrong, I’ve tried some of the scaffolding and immersive learning strategies you talk about with the emergent bilingual students in my own classroom teaching. The problem I’m finding is that by the time these immigrant students get to high school they’ve given up on learning. They don’t see the value of putting forth any real effort to learn because a solid education is not something that is highly valued in their home environment. For many of these immigrant students, their highest aspiration in life is to become a foreman of day laborers in the agricultural or construction sectors. This is all they know. Moreover, the vast majority of these immigrant students’ parents (both father and mother) hold multiple jobs just*

to earn enough to provide food and shelter for their families. There is no discussion at home about appreciating the value of an education and how acquiring an education can open up future career opportunities. Because of the lack of any reinforcement at home and their limited backgrounds, many of the immigrant students sitting in my classroom have already ‘checked out’ and have given up on learning. As a result, I need to focus my time and efforts on the kids in my classroom who want to learn and who are capable of making progress in mastering the state’s prescribed curriculum.

As the end of the first nine weeks approached and teachers began the process of reviewing and analyzing their students’ nine week assessment results, teachers’ negative reactionary comments grew in both number and volume as increasing numbers of teachers during their grade-level planning team meetings continued to openly balk at what they perceived as the impracticalities of implementing the kinds of bilingual instructional strategies principal Becerra was promoting. As more and more teachers joined the chorus of negative reactions against the culturally sensitive, immersive learning bilingual instructional strategies their new principal was advocating they implement in their classrooms—fueled on by the most veteran teachers who were the most vociferous in the protests, Becerra realized he had reached an impasse in his instructional coaching leadership at Marroquin East High School. Still believing in the positive learning impact the instructional strategies he was advocating for could have on the Hispanic students at Marroquin East High School, he reached out to educational consultants at the regional Education Service Center for assistance. After a series of conversations with ESC staff on the possibilities of designing a series of professional development (PD) in-services for teachers at his campus, he used his campus’s staff development budget to contract with ESC consultants to deliver a series of PD in-service sessions to Marroquin East High School teachers in January and February of 2023. The PD sessions delivered by the ESC consultants focused on systematically explaining current empirical evidence existing in the instructional improvement literature for the use of bilingual instructional planning and teaching strategies to support emergent bilingual students’ successful academic learning. Becerra hoped that this series of PD in-service sessions delivered to Marroquin East High School teachers by the education service center consultants would help his teachers better understand and internalize the advantages to both them and their emergent bilingual students of using these bilingual education-centered strategies in their own instructional unit planning and classroom teaching.

Refined Reframing of Marroquin East High School’s Student-Learning Problem as a Context-Specific Problem of Professional Practice

The PD in-service sessions on bilingual instructional planning and teaching strategies delivered in early 2023 to teachers across all ninth through twelfth grade levels by the contracted education service center consultants did not have the positive impact that Becerra had hoped for. Teachers did not like being lectured to by external consultants who were not directly familiar with the school’s teaching and learning environments and who, from the teachers’ perspectives, did not fully understand the instructional challenges the teachers were facing with their specific diverse student populations. If anything, requiring teachers to sit through these PD in-services caused teachers to become even more

entrenched in their negative attitudes regarding the value of utilizing literature-supported, bilingual education-centered strategies to serve these immigrant students, whom the teachers had already written off as not even being interested in their own learning growth.

Principal Becerra now realized that any kind of “quick-fix” PD implementation strategy was not going to work in dealing with Marroquin East High School teachers’ negative attitudes regarding their emergent bilingual students—attitudes which were fueling teachers’ lackadaisical instructional team planning and ineffective classroom teaching practices. What his experiences thus far at Marroquin East HS had taught Becerra was that he would need to dramatically reformulate his turnaround leadership thinking in new ways if he was to be successful in transforming the kind of negative professional learning culture that had become entrenched on this high school campus. To tackle this school turnaround challenge, Becerra decided to form a *Teaching and Learning Equity Intervention Task Force (ITF)* to review the literature on organizational turnaround and instructional improvement and to design and implement a comprehensive plan that could address in positive ways the instructional stagnation that had gripped the campus and was undermining all efforts to date to effect meaningful teaching and learning improvement for both students and teachers. The Teaching and Learning Equity ITF group principal Becerra created consisted of some of the most forward-thinking administrators and grade-level teachers on campus, including: two of his four assistant principals who were most directly involved with instructional oversight; four content area teachers (in the content areas of math, science, English/language arts, and social studies) from each grade level (ninth through twelfth grades)—a total of 16 content area teachers in all, with a mix of both teachers in their first five years of teaching along with other more veteran teachers; six Spanish heritage language teachers who had the most experience teaching at this high school campus; the three full-time instructional coaches assigned to the campus by the district; and the campus’s four guidance counselors.

Becerra and his Marroquin East High School intervention task force (ITF) members began work during March of 2023 to collect multiple kinds of available student learning performance data across all student demographic subgroups in the four core content area subjects over the most recent six-year period to inform their investigative analysis efforts. The data the ITF group members collected including archived student benchmark assessment data available from individual grade-level teacher planning teams across ninth through twelfth grades, End of Course exam scores in the main content areas of mathematics, science, English/language arts, and social studies for all student demographic groups, along with student course failure records and grade-level retention data by student demographic sub-group. Because the ITF team members knew they needed to uncover some of the underlying root causes of the teaching and learning cultural stagnation dilemma affecting their campus, Becerra and his ITF colleagues also worked to collect a variety of qualitative data—both observational data of teachers’ regular teaming practices and teachers’ own perspectivist data regarding their instructional challenges—that they felt would be critical to providing them with data-informed insights that could illuminate their investigative work. Individual task force members attended core content teachers’ weekly grade-level professional learning community (PLC) team meetings across the

campus's ninth through twelfth grades to observe teachers' student assessment data analysis activities and how teachers were leveraging their analyses of students' learning performance data to inform their overall instructional planning and classroom teaching practices. Task force members also conducted multiple grade-level "focus group interviews" with core content teachers to provide teachers with open forums in which they could freely share their perspectives regarding the instructional planning and classroom teaching challenges they were facing as they strived to respond effectively to the diverse learning support needs of both the Hispanic and non-Hispanic students in their classrooms.

Data Analysis and Literature Review Activities. The ITF team's analyses of the campus's longitudinal student learning performance data corroborated the striking cumulative decline in the learning performance of the campus's Hispanic students in comparison with non-Hispanic students (i.e., in particular, with Anglo/white and Asian American students) over the most recent six-year period. This comparative learning performance gap was especially pronounced when examining the academic performance of the campus's sub-group of emergent bilingual (EB) Hispanic immigrant students. These EB high school students—many of whom were also experiencing the added economic challenges associated with being members of large families in which their older siblings and parents were working multiple day-laborer jobs to survive—typically have been in the United States with their families for a number of years and have participated in the district's English as a Second Language (ESL) and Dual Language (DL) programs for elementary and middle school students. However, by the time these students reached high school, their English language learning acquisition abilities had stalled and their English academic learning in multiple content areas had essentially become frozen. As a result, many of the EB students sitting in Marroquin East HS classrooms were unresponsive to their teachers' attempts to involve them in instructional activities and exhibited very little motivation to learn. During ITF team members' focus group interviews with teachers, some of the more outspoken veteran teachers offered their own views as to why many teachers at the campus felt that they had hit a brick wall in terms of their attempts to support these EB students' continued learning. As one eleventh grade English/language arts teacher explained: *You have to understand the psychology of professional learning at Marroquin East High School from the teachers' own perspectives. These Marroquin East teachers—especially the veteran teachers who have been teaching in this district and at this campus for fifteen to twenty or more years—have had to put up year after year with countless exhortations from well-meaning but unnecessarily top-down authoritative and demanding principals who constantly goaded teachers to 'improve their instruction' through more systematic planning to design and deliver meaningful classroom lessons and instructional units that will ensure students perform well on end-of-course exams and state standardized performance tests. These never-ending verbal demands from principals have created a professional learning climate and culture at Marroquin East High School that, at least in the minds of many veteran teachers, is perceived to be overly micro-managerial and oppressive and anything but conducive to supporting teachers' genuine professional learning.* This sentiment was echoed by another veteran social studies teacher who commented bluntly: *Yes, campus administrators at this school simply do not understand the instructional roadblocks we are facing with the majority of these Hispanic students, especially the*

school's large sub-group of emergent bilingual immigrant students. These students are lazy and don't show any real interest in acquiring an education, and they are a source of constant disruption in my classroom and distract the other students in the class who are actually capable of learning the content.

Based on these comments from these and other teachers received during the focus group interviews and recorded by intervention task force members, Becerra and his ITF colleagues now more fully understood that, if they were going to positively transform the instructional planning, teaching, and learning culture at Marroquin East High School, this could not be accomplished by top-down mandates or by overtly direct interventionist actions by his ITF team members. The only way that genuine cultural transformation could be realized at this school was through spearheading and achieving cultural transformation **from the inside out**. The intervention team recognized that the only stakeholders who had the power to bring about genuine teaching and learning renewal on this campus would be the teachers themselves. Rather than trying to legislate cultural change, Becerra and his ITF team members now realized that the turnaround leadership task for them would be to find creative ways to incentivize teachers to *take active ownership in leading their own instructional planning professional learning transformation* and assume the primary leadership roles in effecting authentic teaching and learning equity improvement at Marroquin East High School.

Following completion of their multifaceted data collection and analysis activities (including observational data collected during grade-level PLC meetings, perspectivist data gleaned from focus group interviews with teachers, and results of disaggregated analyses of multiple sets of student-learning performance data), principal Becerra and his intervention task force colleagues were able to generate some new insights into what they believed could be some data-supported “key factors” (i.e., underlying root causes) contributing to Marroquin East High School's persistent immigrant/emergent bilingual student sub-group “deficient biliteracy academic learning progress” and overall Hispanic student population “learning disparities” problems. A **first insight** that emerged from the task force's collective data analyses was that many of the campus's core content teachers over time had developed some severely entrenched *deficit thinking mindsets* regarding what these teachers perceived to be the “learning capabilities” of the immigrant/emergent bilingual students populating their classrooms. During focus group interviews a number of the campus's core content area teachers expressed their belief that, in addition to the English “frozen second language acquisition” developmental challenges these students were exhibiting, their cultural backgrounds and home economic situations were significant factors impeding these students' secondary-level academic content learning abilities as well as directly dampening their motivation for learning. The constant disruptions these students instigated during regular classroom lesson activities and their incessant off-task behaviors further confirmed in teachers' minds that these students simply did not possess the desire to learn. Teachers' own day-to-day observations of these students' low self-esteem and learning motivation levels served to bolster and solidify teachers' beliefs about immigrant/emergent bilingual and other Hispanic sub-groups' limited learning capabilities. As a result, these beliefs had become entrenched dimensions of teachers' overall pedagogical thinking and were causing teachers to slack off in their weekly instructional team planning

efforts in trying to address these students' learning support needs. A **second insight** that emerged from the intervention task force's analyses of grade-level team meeting observations and teacher interview data was that teachers appeared, at best, to have some pronounced *superficial understandings of the purposes of data teaming*. In particular, teachers did not seem to have internalized in their minds the concrete purposes and payoffs to both them and their students of analyzing student assessment data during their grade-level team meetings and how these analyses could assist teachers in better comprehending individual students' learning challenges and, in turn, help to drive teachers' data analysis-informed instructional unit planning. Teachers at Marroquin East High School were, in fact, demonstrating to a large degree the kind of "PLC lite" instructional planning behaviors and practices famously described in the instructional planning and professional learning community (PLC) literature by Rick Dufour and Douglas Reeves (Dufour & Reeves, 2016). Rather than engaging together in targeted deep data digs into their students' disaggregated benchmark and formative assessment data to try to investigate the root causes of their low-performing students' learning problems during their grade-level team meetings, teachers would spend the majority of their instructional planning time focused on developing instructional units that were designed to primarily benefit those students whom the teachers deemed were most capable of learning the content and who had the best chances of achieving passing scores on the state's core content End of Course exams. In effect, these teachers had adopted a pragmatic "teach to the test" mentality and had essentially written off their immigrant/EB students as simply incapable of performing well on these state-mandated learning accountability tests.

The intervention task force's data analysis efforts further revealed a **third insight** into teachers' overall collaborative planning practices. Although core content teachers routinely shared common team planning periods with the campus's staff of Spanish heritage language and bilingual education teachers, these teachers did not spend significant amounts of time during weekly planning meetings in collaborating intentionally to design various kinds of immersive learning experiences for the diverse learners in their classrooms. In particular, teachers did not make any concerted effort to try to incorporate *biliteracy* "scaffolded" learning opportunities for the immigrant/emergent bilingual students—who could directly benefit from engaging in incrementally structured "scaffolded" academic language peer learning activities with their native English-speaking peers—to help these EB students develop their full dual language-learning capacities. The literature on second language acquisition emphasizes how native language learners, such as Spanish-speaking emergent bilingual students, who are struggling to learn English as their "second acquisition" language typically are only able to make substantive progress in their dual language learning when they are afforded structured opportunities to grasp and internalize core academic concepts in math, science, language arts and other core subject areas *first* in their native "heritage" language (i.e., Spanish). Emergent bilingual learners can then leverage these conceptual understandings they develop in their native language as a "scaffold" to transfer the newly acquired academic learning to their "second acquisition" language through forming *bilingual learning connections* in their minds. In essence, these students are able to learn new academic concepts in *both* their native and second acquisition language through becoming familiar with and internalizing new English words and phrases that correspond to their familiar native Spanish language words and phrases.

Although this “language transference” principle is understood by Spanish heritage language teachers and biliteracy instructional coaching specialists, core content teachers and Spanish heritage language teachers who meet together in weekly grade-level team meetings at Marroquin East High School are not utilizing these instructional principles to design carefully structured *biliteracy* scaffolded immersive peer-learning opportunities for their emergent bilingual students—scaffolded learning opportunities that can help these students develop solid “cross-linguistic” academic learning proficiency in ways that ensure these EB learners’ continued biliteracy academic learning development across the core content areas.

Finally, intervention task force members gleaned a critical overarching insight from their collective completed sets of quantitative and qualitative data analyses. This ***fourth insight*** highlighted the fact that any “intervention program” that sought to positively transform and invigorate the instructional planning and teaching and learning equity culture of this high school campus could not simply be an intervention program that was designed and implemented by the ITF team members themselves. Genuine cultural transformation at Marroquin East High School could only be effectively designed and accomplished with the *direct involvement* of the campus’s core content teachers and associated instructional staff (i.e., Spanish heritage language and bilingual education–certified teachers).

Having generated these new data analysis–informed insights pointing to some of the potential underlying “teacher-centered” root causes of Marroquin East High School’s specific emergent bilingual sub-group and overall Hispanic student population “learning performance gap” problems, principal Becerra and his ITF colleagues then reviewed a number of relevant literatures to identify some practical, literature-supported instructional improvement “strategies” they could utilize to help them design a multifaceted professional development (PD) intervention program to address Marroquin East High School teachers’ specific authentic data teaming and bilingual instructional planning and teaching needs. To gain insights and practical strategies on how to properly address Marroquin East HS teachers’ *deficit thinking mindsets* regarding their perceptions of the limited learning capabilities of the immigrant/emergent bilingual and other Hispanic student sub-groups in their classrooms, principal Becerra and his colleagues reviewed recent writing in the psychology literature regarding “fixed” versus “growth” mindsets that can impede or enhance organizational members’ own professional learning development and overall organizational effectiveness (Dweck, 2016). To obtain information on practical strategies on how to develop educators’ *authentic data teaming and collegial learning development* capacities—including helping teachers learn how to engage together in peer-to-peer classroom observations and iterative coaching cycles to enhance their team-centered instructional planning and classroom teaching practices, Becerra and his task force colleagues examined a variety of available resources contained in the instructional coaching and teaching and learning improvement literatures (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; Ende, 2016; Hill, 2024; 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; Rittel & Webber, 1973; Stringer, 2013; Supovitz

& Klein, 2003; Venables, 2011, 2014; White, 2011). Finally, Becerra and his ITF colleagues reviewed the rich and continually evolving literature on the education of multilingual learners (Cummins, 1979, 1981, 2000, 2021; de Jong & Harper, 2005; Echevarria & Vogt, 2010; Echevarria et al., 2017) and the literature on culturally responsive teaching practices (Griner & Stewart, 2012; Khalifa et al., 2016) to identify current supervisory best practices for coaching teachers on how to instructionally plan in effective ways to meet the unique biliteracy academic and social learning development and support needs of emergent bilingual and other culturally diverse students.

Program Intervention Design: Development and Implementation

The collective insights obtained from data analysis procedures along with understandings and practical instructional improvement strategies gleaned from the literatures reviewed were utilized by principal Becerra and his ITF team colleagues to reconceptualize what was the underlying root cause of the surface-level student-learning problem (i.e., the persistent learning gap disparities among immigrant/emergent bilingual students and other Hispanic sub-groups) confronting instructional improvement leaders at Marroquin East High School. Becerra and his task force colleagues now more fully understood that, although the documented deficiencies in biliteracy academic learning performance among EB and other Hispanic student sub-groups was unquestionably the campus's ongoing "surface-level" student-learning problem, this student-learning problem was being fueled at an underlying systemic level by core content area and other teachers' entrenched deficit pedagogical thinking and associated unfocused and ineffective instructional team planning and classroom teaching practices. Specifically, Marroquin East High School's core content and other teachers' inability to engage together in effective biliteracy instructional planning and teaching practices, in fact, were being caused by these teachers' own: 1) ingrained *deficit thinking mindsets* regarding the perceived "limited learning capabilities" of the EB and other Hispanic learners in their classrooms; and their resulting 2) *lack of competency in authentic data teaming and data-informed instructional planning* in not wanting to intentionally engage in careful, multi-leveled analyses of students' disaggregated assessment data and then leverage the results of these analyses to design and deliver authentic, data-informed "multi-linguistic, cross-curricular instructional units" that could properly address the specific biliteracy learning development and support needs of their diverse students.

Following from this analytic logic, principal Becerra and his instructional task force colleagues formulated the following new root-causal, data analysis-informed **reframed (low inference) Problem of Professional Practice rationale statement** for Marroquin East High School: *Marroquin East High School's core content teachers' potential for developing their authentic data teaming practices has been stymied due to their ingrained deficit thinking-driven pedagogical mindsets and instructional planning attitudes that have grown more and more entrenched over time regarding the perceived limited biliteracy learning capabilities of the populations of immigrant/emergent bilingual learners and other Hispanic student sub-groups on this campus. These teachers' deficit mindsets and instructional planning attitudes, in fact, collectively constitute an underlying root-causal 'problem of professional practice' that has negatively impacted the overall teaching and learning culture at Marroquin East HS. Thus,*

teams of core content teachers in ninth through twelfth grades are in need of a targeted professional development (PD) intervention program to help these teachers: 1) critically examine their lack of practical knowledge regarding emergent bilingualism and associated misunderstandings regarding the learning capabilities of EB students; and 2) increase their competency levels and proficiencies in being able to engage together with Spanish heritage and dual language teachers in authentic data teaming to design and deliver multi-linguistic, cross-curricular instructional units in the core content areas (English/language arts, math, science, and social studies) that can provide immigrant/EB and other diverse learners with meaningful, high-engagement ‘biliteracy’ interactive and immersive classroom learning opportunities. Based on this reframed Problem of Professional Practice statement, Becerra and his ITF colleagues were then able to generate the following **refined Theory of Action (If/Then) operational statement**: *IF the campus’s assistant principals and instructional coaches: 1) work proactively to help core content area teachers better understand immigrant EB and other Hispanic students’ unique cultural and linguistic backgrounds and how these backgrounds, rather than being considered as ‘deficits’, can be viewed and leveraged as ‘unique assets’ for multi-cultural, multi-lingual learners in a twenty-first-century global society; and 2) provide systematic modeling and coaching to grade-level teams of core content area teachers, Spanish heritage language teachers, and other bilingual education–certified instructional staff on how to engage together in ‘authentic data teaming’ (i.e., collaborating together in systematic analyses of students’ disaggregated benchmark and other formative assessment data to probe the underlying root causes of students’ learning deficiencies, and then leveraging the results of teachers’ disaggregated data analyses to inform their differentiated instructional unit planning), THEN grade-level teams of core content teachers, Spanish heritage language teachers, and other bilingual education–certified instructional staff will be able to collaborate in creative ways to design a variety of scaffolded learning opportunities for EB and other diverse learners to help these students build meaningful and long-lasting multi-cultural / multi-linguistic ‘cross-curricular’ academic learning relationships in their minds in the areas of vocabulary, foundational core content concepts and principles, verbal and written interactive communication, and other interrelated academic and social learning dimensions that can positively support these diverse students’ ‘biliteracy learning development’ in the core content areas.*

Collectively, based on results of their systematic data analyses and reviews of literature-based turnaround instructional improvement principles and strategies in conjunction with the insights obtained from their reframed Problem of Professional Practice rationale and refined Theory of Action statements, principal Becerra and his ITF colleagues were able to construct the following Marroquin East High School **Change Drivers Diagram** (see Figure 1). This Change Drivers Diagram provided Becerra and his ITF colleagues with a useful *conceptual schematic* illustrating how key change agent leadership “operational strategies” (i.e., change drivers) culled from relevant instructional improvement literatures could be dynamically leveraged in practical ways to inform their subsequent campus-based “professional learning intervention design” development and implementation efforts.

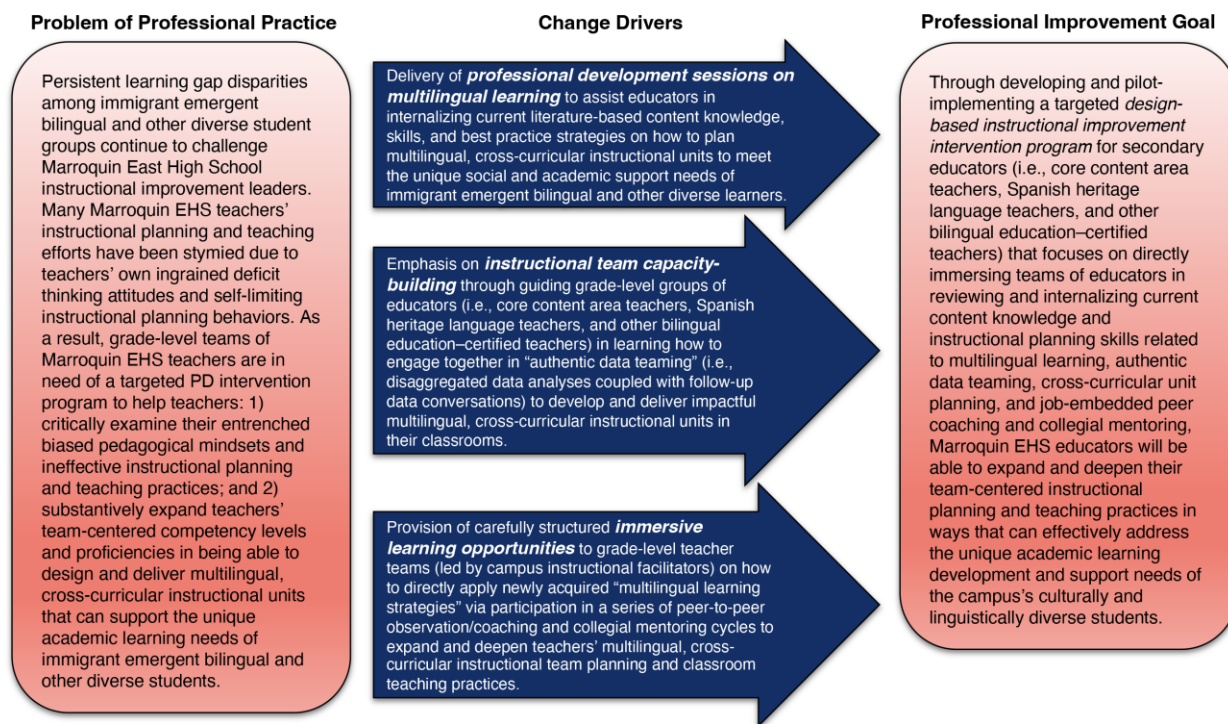


Figure 1 Marroquin East High School Change Drivers Diagram

Intervention Design Development

The Marroquin East High School Change Drivers Diagram (Figure 1) provides a succinct schematic illustrating how principal Becerra and his intervention task force colleagues applied key professional learning concepts, skills, and team planning strategies contained in the multilingual learning and instructional improvement literatures to address educators' ingrained deficit thinking pedagogical mindsets and self-limiting instructional planning and teaching behaviors to jumpstart grade-level teams of teachers' multilingual, cross-curricular instructional unit planning and classroom teaching throughout the campus. The **first change driver** focuses on exposing teachers to examining the most current content knowledge and empirically grounded research on best practice skills and strategies for engaging in effective instructional planning to support the unique academic development and support needs of multilingual learners. This first change driver seeks to provide teachers with a theoretical frame and empirically supported lens through which teachers can reexamine and reevaluate their own potentially narrow-visioned biases and negative perceptions of the academic learning capabilities of the immigrant/emergent bilingual and other diverse students in their classrooms through helping teachers more fully understand the expanded interactive teacher-led and peer-to-peer learning opportunities that can accrue to their diverse students by focusing their team-centered efforts on genuine *biliteracy-centered* instructional team planning. The **second change driver** centers on providing structured opportunities to help teachers develop their data-driven instructional teaming capacities through assisting

teachers in understanding and internalizing key principles of “authentic data teaming”—namely, learning how to: 1) engage together in systematic analyses of students’ disaggregated assessment data to identify underlying root causes of individual student’s learning problems; and 2) leverage the results of these deep-dive data analyses to directly inform teachers’ multilingual, cross-curricular instructional unit planning efforts. Finally, the **third change driver** taps into the power of immersive learning within which teachers participate together (paired into multiple “co-partner” teams of two teachers each) in iterative cycles of peer observation/coaching and collegial mentoring as these teachers implement and evaluate their newly designed multilingual, cross-curricular instructional units in their classrooms. Importantly, these job-embedded, co-partner *peer observation/coaching and collegial mentoring activities* can empower teachers to “learn from each other” and “work together in new ways” to effectively address the unique social-interactive and academic learning support needs of the culturally and linguistically diverse students populating their classrooms.

Using their Change Drivers Diagram as an “intervention design conceptual schematic” to guide their instructional improvement operational thinking, principal Becerra and his intervention task force colleagues were then able to develop their detailed **Instructional Improvement Intervention Program “Implementation Plan”** for the Marroquin East High School campus (see Table 1). The Marroquin East High School Multi-Week Intervention Plan consisted of initial sets of professional development (PD) content knowledge and skills acquisition modules followed by carefully structured “hands-on, immersive team-learning” instructional unit development projects and follow-up “peer observation/coaching and collegial mentoring” classroom application activities that were collectively designed to jumpstart and invigorate teachers’ capacities for engaging together in substantive multilingual, cross-curricular instructional planning and teaching to expand and deepen their diverse students’ multilingual learning performance potential.

Table 1 Marroquin East High School Instructional Improvement Intervention Program “Implementation Plan”

WEEK	FORMAT	CONTENT / ACTIVITY
1	Meetings of all selected participants	Introducing key concepts: - 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 • Review of 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 in a student’s “native language” facilitates language skills development in the second “acquisition language”) (Cummins, 1979, 1981, 2021) • Examining the specific kinds of instructional support English learners need at different stages of their acquisition of conversational and academic English • Exploring the benefits to students of adopting a <i>whole literacy approach</i> to interdisciplinary instructional planning and classroom-based teaching and learning—i.e., understanding the importance of developing students’ receptive language skills and expressive language skills within an <i>integrated pedagogy</i> that addresses “core literacy fundamentals” that improve learning outcomes and close achievement gaps in students’ overall language and literacy development, including: the science of reading instruction; concurrent skill development instruction; frequent and wide reading; and the reading/writing connection (Hill, 2024) • Developing a literature-grounded, practical understanding of <i>intentional co-teaching</i> for multilingual learners—i.e., content professionals partnering with multilingual learning professionals to share planning, instruction, and evaluation to effectively meet the overall learning support needs of multilingual learners (Porter, 2024) • What are the advantages of <i>bilingual, cross-curricular instructional teaming</i> for enhancing emergent bilingual and English-speaking students’ classroom-based, interactive peer learning? • What are the advantages of <i>bilingual, cross-curricular teaming</i> for enhancing teachers’ continuous professional learning?
--	--	---

		- How can core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers engage together as cross-curricular instructional planning teams to design and implement creative <i>biliteracy instructional units and assessments</i> to support EB students’ successful “academic biliteracy” learning? - Promoting a biliteracy curriculum–centered “continuous professional growth” mindset among educators in a high diversity metropolitan high school (and school district) to support the academic success of EB and other diverse learners
2	Meetings of all selected participants	Sessions on <i>authentic data teaming</i> practices: - Understanding the difference between “PLC lite” and authentic data teaming - Modeling by assistant principals and instructional coaches on how core content area teachers, Spanish heritage language teachers, and other bilingual education–certified teachers can collaborate as grade-level <i>bilingual, cross-curricular 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 - 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 - 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, including: 1) deepens active learning engagement; 2) expands

		individual and group learning capacities; 3) builds relational bonds across learners; 4) incorporates opportunities for peer-to-peer coaching into the overall learning process; and 5) promotes long-term communal learning success
3 through 5	Classroom observation/peer coaching and collegial mentoring cycles	- Teachers will conduct multiple classroom observations of fellow teachers focused on the use of intentional co-teaching and appropriate bilingual, cross-curricular instructional strategies that promote emergent bilingual (native Spanish-speaking) and native English-speaking students' interactive 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 "deep learning".
3 through 5	Individual interview meetings with co-partner teacher teams	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 Becerra along with the campus's five full-time instructional coaches and various members of the Intervention Task Force served as session facilitators for the various new knowledge acquisition meetings and immersive team learning activities that comprised the Marroquin East High School Instructional Improvement Intervention Program (see Table 1). Educator participants in the intervention program included both ninth through twelfth grade *content professionals* (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 professionals* (i.e., Spanish heritage language teachers and other bilingual education-certified teachers). A total of thirty six teachers—twenty four

ninth through twelfth grade core content area teachers (six teachers from each grade level) and twelve multilingual learning teachers (six Spanish heritage language teachers and six other bilingual education–certified teachers)—participated in the intervention program.

Week One of the intervention program provided participants with a forum for examining current literature-based knowledge and concepts associated with understanding and serving the learning support needs of immigrant/emergent bilingual and other culturally and linguistically diverse students. Specific topics covered during this initial week of the intervention program included: 1) exploring relevant concepts and understanding the differences between/among bilingualism, multilingualism, and social versus academic biliteracy; 2) understanding the cultural, linguistic, and socioeconomic backgrounds and “academic biliteracy” learning development and support needs of emergent bilingual (EB) students; 3) spending time discussing the critical concept of *educator deficit thinking* and, importantly, guiding educator participants in critically examining their own potential *deficit thinking mindsets and practices* regarding student bilingualism and biliteracy and how educators’ unintended biases and preconceptions can influence educators’ perceptions of their EB students’ motivation levels and “academic biliteracy” learning capabilities; 4) reviewing current research on *linguistic interdependence* and *cross-language transference*, including recent empirical evidence supporting how bilingual students can leverage academic language skills development in their “native heritage language” to facilitate and enhance their corresponding language skills development in their second “acquisition language” (Cummins, 1979, 1981, 2021); 5) exploring and discussing the benefits to students of adopting a *whole literacy approach* to interdisciplinary instructional planning and classroom-based teaching and learning (Hill, 2024); 6) engaging in whole-group discussion regarding the practical advantages of adopting *intentional co-teaching* as a preferred instructional model for teaching multilingual learners whereby content professionals partner with multilingual learning professionals to share planning, instruction, and evaluation best-practice strategies to effectively meet the overall learning support needs of multilingual learners (Porter, 2024); 7) examining a variety of instructional strategies for building EB students’ biliteracy social and academic language formation and growth within an overall biliteracy interactive teaching and learning environment; and 8) critically exploring the multiple instructional planning and classroom teaching payoffs for grade-level groups of content professionals and multilingual learning professionals (i.e., core content area teachers as well as Spanish heritage language teachers and other bilingual education–certified teachers) of learning how to work together in *interdisciplinary instructional planning teams* to design and implement creative *biliteracy instructional units and assessments* to expand and enhance both immigrant/emergent bilingual and native English–speaking students’ *multilingual* peer-to-peer interactive learning across the core content areas.

Week Two of the intervention program focused on assisting educator participants in gaining in-depth knowledge and skills on how to engage together in the practice of *authentic data teaming*. Participants were coached during week two to help them understand the difference between “PLC lite” instructional planning and *authentic data teaming*, including gaining knowledge and skills on how to engage

together in the two main components of authentic data teaming—namely, learning how to collaborate as grade-level *bilingual, interdisciplinary instructional teams* to: 1) conduct “deep data dives” into EB and other students’ disaggregated benchmark and formative assessment data to investigate and identify underlying root causes (potential inhibiting factors) of students’ learning deficiencies; and then 2) engage in “collaborative data conversations” about their data analysis results to inform their bilingual, interdisciplinary instructional unit planning. During this second week multiple grade-level groups of core content teachers and multilingual learning teachers also participated together in an *immersive biliteracy team-learning project* activity—with intensive modeling and coaching feedback provided by intervention facilitators—on how to engage together in “authentic data teaming”. This team-learning project activity involved groups of core content teachers and multilingual learning teachers in learning how to engage together in rigorous analyses of students’ disaggregated learning assessment data followed by focused data conversations as a means to then design, plan, and implement a complete “bilingual, interdisciplinary instructional unit” in their respective grade-level classrooms.

Weeks Three through Five of the intervention program presented educators with multiple opportunities to “apply” the new knowledge and skills learned during the first two weeks of the program through engaging together in iterative sets of intensive peer observation/coaching and collegial mentoring cycles designed to provide time for grade-level teams of teachers to actively *learn from each other*. To help strengthen these applied learning experiences, core content teachers and multilingual learning teachers within each grade level were paired into “co-partner teams” (each “co-partner team” consisting of one core content teacher paired with one Spanish heritage language or other bilingual education–certified teacher) to engage in multiple classroom observation/peer coaching and collegial mentoring cycles. Individual members of each “co-partner team” were tasked with observing and critiquing their team partner on their colleague’s (as well as their own) abilities in being able to “integrate” their newly acquired content knowledge and differentiated instructional strategies into their daily teaching practices in ways that could expand and deepen the biliteracy learning development of the diverse learners in their classrooms—both immigrant/emergent bilingual and native English–speaking students.

The specific *immersive team learning intervention design* of the Marroquin East High School Intervention Program is depicted in Figure 2 (see below). Figure 2 illustrates the sequential series of interactive new knowledge acquisition, critical self-reflection, and hands-on, immersive team-learning activities grade-level teams of Marroquin East High School educators engaged in within the five-week Instructional Improvement Intervention Program. These interactive team-learning processes and activities assisted multiple grade-level teams of core content area teachers, Spanish heritage language teachers, and other bilingual education–certified teachers across ninth through twelfth grades in reevaluating their ingrained pedagogical deficit thinking mindsets and behaviors and refocusing their collective team-centered instructional planning and teaching practices. The iterative developmental steps grade-level teams of teachers followed during the intervention program included: 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) understanding and developing *authentic data teaming practices* to redirect and rejuvenate teachers' "multilingual learning-centered" instructional planning through actively participating in hands-on, immersive team-centered "*multilingual, cross-curricular instructional unit*" development and classroom implementation project activities; 4) implementing the newly developed instructional units in classrooms supported by co-partner teams of teachers' follow-up participation 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, including identifying aspects of instructional unit delivery and interactive teaching styles and behaviors still needing improvement; and 5) participating in grade-level team *debriefing sessions* to share "implementation insights" and multilingual teaching "best practices" on how to effectively address the unique academic development and support needs of the culturally and linguistically diverse learners in their classrooms.

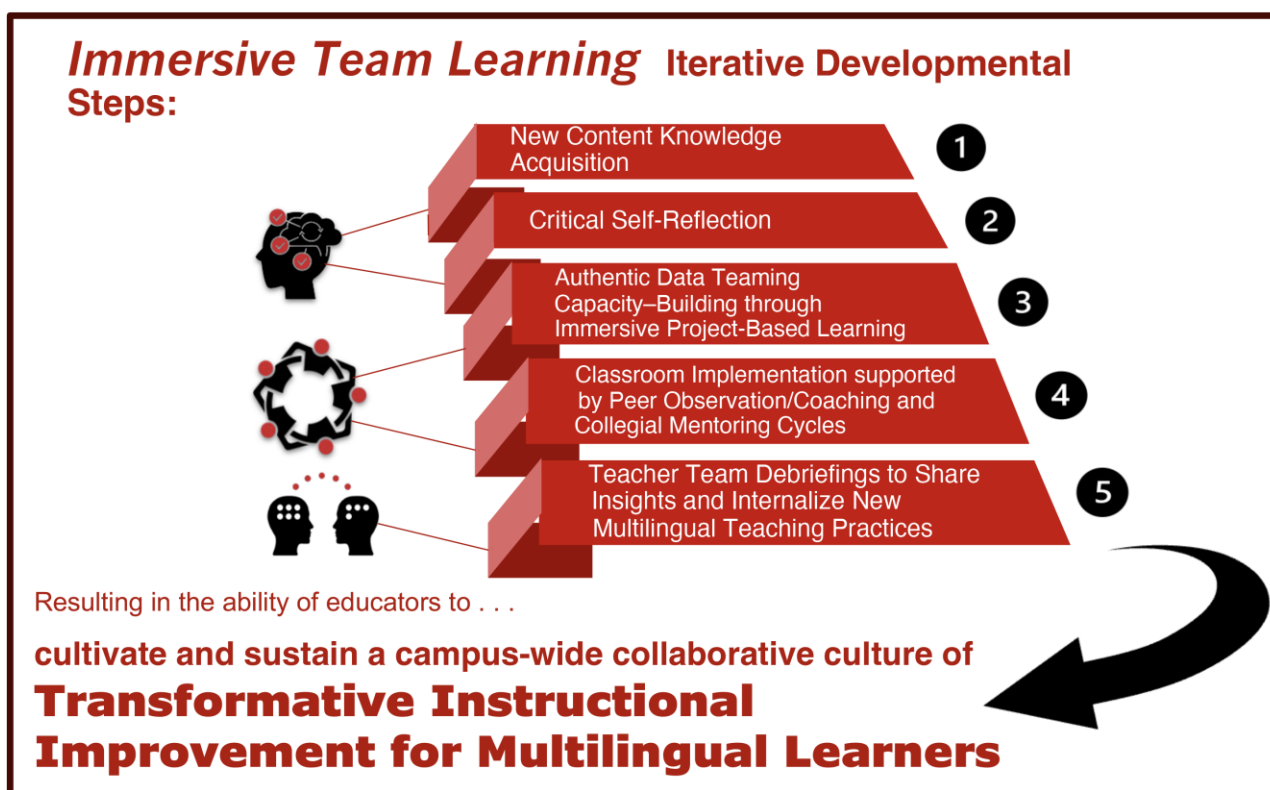


Figure 2 Immersive Team Learning Intervention Design

Design-Based Instructional Improvement Results and Findings

A variety of process and impact data were collected and analyzed during the implementation of the professional learning intervention program to elicit perspectivist input from educator participants as they progressed through the various PD modules and PLC integration sessions to gauge the overall effectiveness of the *'knowledge and skills development' coupled with 'follow-up immersive interactive applied learning'* design of the intervention program. Collective analyses of iterative process and post-implementation impact data were instrumental in helping ITF members gauge the usefulness of the Marroquin East High School design-based intervention program for: 1) changing educator participants' pedagogical mindsets regarding the learning capabilities of immigrant/emergent bilingual learners and other culturally and linguistically diverse students; and 2) incentivizing educators to want to reconceptualize and reinvigorate their grade-level data teaming and interdisciplinary instructional planning practices to better meet the biliteracy learning support needs of their campus's diverse student populations. The Marroquin East 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) perspectives obtained from teachers during informal individual and group interviews that were conducted during various points during the multi-week intervention program to gauge any demonstrable changes in teachers' pedagogical thinking as they participated in the various PD sessions and immersive learning activities; and 3) ITF members' own observations of teachers' regular weekly grade-level PLC team meetings to directly discern if teachers' iterative participation in the intervention program's "knowledge and skills development" sessions and "applied learning" activities was having any demonstrable impact on their data teaming and 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 "focus group" interviews conducted during the final two weeks of the intervention program to assess the collective impact the "co-partner team" multiple peer observation/coaching and collegial mentoring cycles had on participating teachers' *multicultural pedagogical thinking and bilingual teaming–centered instructional planning and teaching practices*. Collective analyses of these various process and impact data provided some positive supporting evidence that the multi-week intervention program designed and implemented by principal Becerra and his intervention task force colleagues was demonstrably effective in addressing Marroquin East High School's identified root-causal Problem of Professional Practice for campus educators [i.e., *Marroquin East High School's core content teachers' potential for developing their authentic data teaming practices has been stymied due to their ingrained deficit thinking–driven pedagogical mindsets and instructional planning attitudes that have grown more and more entrenched over time regarding the perceived limited biliteracy learning capabilities of the populations of immigrant/emergent bilingual learners and other Hispanic student sub-groups on this campus. These teachers' deficit mindsets and instructional planning attitudes, in fact, collectively constitute an underlying root-causal 'problem of*

professional practice’ that has negatively impacted the overall teaching and learning culture at Marroquin East HS. Thus, teams of core content teachers in ninth through twelfth grades are in need of a targeted professional development (PD) intervention program to help these teachers: 1) critically examine their lack of practical knowledge regarding emergent bilingualism and associated misunderstandings regarding the learning capabilities of EB students; and 2) increase teachers’ competency levels and proficiencies in being able to engage together with Spanish heritage and dual language teachers in authentic data teaming to design and deliver multi-linguistic, cross-curricular instructional units in the core content areas (English/language arts, math, science, and social studies) that can provide immigrant/EB and other diverse learners with meaningful, high-engagement ‘biliteracy’ interactive and immersive classroom learning opportunities.].

Principal Becerra and his intervention task force colleagues’ collective analyses of the sets of process and impact data collected during the implementation of the five-week PD intervention program yielded some discernible **Design-Based School Improvement Results and Findings** associated with the Marroquin East 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, as teachers navigated through the new knowledge acquisition modules in the first two weeks of the intervention program, participating teachers began to become more consciously aware of the extent to which many of these teachers had developed and internalized (unintentionally or otherwise) some strong *deficit pedagogical mindsets* regarding the academic learning capabilities and motivation levels of the immigrant/emergent bilingual (EB) and other diverse students populating their classrooms. It was only after becoming exposed to and spending time during the intervention program’s “new knowledge acquisition” modules in *actively reflecting on* the insights available in the recent multilingual instructional literature elucidating the negative impacts of teacher deficit thinking on emergent bilingual students did participating teachers begin to more clearly understand and internalize how their own negative attitudes and entrenched biases regarding the perceived learning capabilities of their immigrant EB and other diverse students were negatively affecting their team-centered instructional planning and classroom teaching/learning practices. The campus’s intervention task force’s analysis of module exit-ticket responses and focus-group interview data collected following the “key concepts” discussion sessions held during Week One of the intervention program revealed that teachers found these new knowledge acquisition and discussion sessions particularly enlightening. In particular, these Week One sessions helped participants realize that it was teachers’ own lack of professional knowledge and unspoken closed-minded attitudes about the multicultural, linguistic, and family backgrounds and unique academic and social learning support needs of their campus’s immigrant EB and other diverse students that were the real impediments preventing teachers from being able to engage in fully-informed bilingual, interdisciplinary team planning in ways that could effectively support these diverse students’ authentic biliteracy learning development needs.

A **second result** that emerged from teachers' collective participation in the immersive learning "biliteracy instructional unit development" project activities during Week Two of the PD intervention program was that teachers began to gain a greater appreciation of the multiple learning dividends that can accrue to both teachers and students from teachers' active participation during their weekly grade-level PLC meetings in *authentic data teaming*—that is, teaming in which teachers are focused on: 1) intentionally engaging in purposeful "deep data digs" and careful analyses of students' learning assessment data; and then 2) leveraging the results of those data analyses to directly inform teachers' *multi-linguistic, cross-curricular instructional planning*. Importantly, as a result of teachers' active participation in the structured immersive learning experiences associated with Week Two's "biliteracy instructional unit development" project activities, teachers began to actively comment to each other how this "biliteracy instructional unit development" project: 1) helped teachers gain a more pronounced understanding of the power of utilizing root-causal student data analysis as a means to help teacher teams pinpoint *inhibiting factors* impeding individual emergent bilingual students' academic biliteracy development; and 2) showed teachers how they could purposefully leverage the results of their root-causal analyses of students' disaggregated assessment data to actively inform and guide their own grade-level team's *collaborative data conversations* about bilingual, cross-curricular instructional unit planning.

A **third result** that became evident from teachers' 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) was that teachers gained *hands-on experience* in directly applying important instructional concepts from the multilingual teaching and learning literature to inform and rejuvenate their grade-level team's biliteracy-centered instructional team planning and classroom teaching practices. Specifically, participating teachers gained practical experience on how they could apply the concepts of *linguistic interdependence* and *common underlying proficiencies* (Cummin, 1979, 1981) to actively support EB students' mental processing skills development. Teachers accomplished this through integrating carefully structured and sequenced biliteracy learning activities into their instructional units within which emergent bilingual students could engage during regular classroom time in peer-to-peer interactive learning activities that could help students become familiar with new academic concepts first in their native "heritage" language (i.e., Spanish) and then, secondly, use their newly acquired conceptual knowledge in their native "heritage language" as a kind of *linguistic anchor* to help students transfer their newly internalized knowledge from their heritage language to their second "acquisition" language (i.e., English). In this way, emergent bilingual students can utilize the power of peer-to-peer learning to incrementally build and support their own authentic *bilingual* academic and social learning development.

The above case study results led to some noteworthy campus-level organizational and professional learning outcomes for educators (i.e., **design research findings**) emanating from the multi-week instructional improvement intervention program implemented at Marroquin East High School. A **first finding** emerging from the Marroquin East High School case study results was that *interactive applied*

learning—in the form of iterative sets of classroom observation/peer coaching and collegial mentoring cycles engaged in by educator “co-partner teams”—can be a powerful design tool for: 1) changing educators’ pedagogical mindsets regarding the transformative power and effectiveness of “direct immersion” collaborative professional learning; 2) positively influencing educators’ perceptions of the dual language learning capabilities of emergent bilingual and other diverse learners; and 3) reinvigorating educators’ overall multilingual, cross-curricular instructional planning and teaching practices. Analysis of all participating teachers’ (i.e., core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers) interview process data collected during weeks three through five of the intervention program provided strong evidence that teachers’ collaborative involvement in the intervention program’s “co-partner team” observation/peer coaching and collegial mentoring *immersive learning* activities incentivized teachers to want to: 1) engage together in more robust “co-partner team conversations” regarding the quality of their own bilingual instructional planning; and 2) openly discuss among themselves the effect their planning was having on improving students’ classroom engagement levels and overall learning motivation. Most notably, teachers’ comments during teacher co-partner team process interviews conducted during the intervention program underscored how teachers began to more fully recognize and appreciate the discernible *bilingual academic and social learning dividends* that were being afforded to the large numbers of immigrant/emergent bilingual learners and other diverse students in their classrooms as a result of teachers’ expanded efforts to intentionally incorporate a variety of carefully designed “student peer-to-peer interactive” dual language and multiculturally sensitive project-based learning activities into teachers’ overall instructional unit planning.

A **second finding** emanating from the Marroquin East High School case study results was that change agent leaders working in high-diversity secondary school settings who are grappling with persistent academic learning performance disparities involving immigrant/emergent bilingual and other diverse student population groups can utilize design-based interventionist methodologies developed and articulated in the education improvement science literature as a means to design and implement systematic *multi-leveled and data analysis–informed PD intervention programs* that hold promise for expanding diverse students’ core content and social learning engagement and academic performance through jumpstarting and expanding educators’ multilingual, interdisciplinary instructional team planning and classroom-based interactive teaching practices. Importantly, adopting a design-based analytic approach to instructional improvement in these kinds of highly diverse school settings can enable groups of educators working in conjunction with campus-based instructional turnaround leaders to probe multiple kinds of available student assessment data along with carefully scrutinizing educators’ own pedagogical mindsets and instructional planning practices that may expose evidence of teachers’ entrenched perspectives and deficit thinking regarding what they believe are the learning capabilities of immigrant/emergent bilingual and other diverse learners. These entrenched educator perspectives and deficit thinking mindsets, left unrecognized and unaddressed, can unfortunately grow and fester within a school’s overall teaching/learning environment and serve as critical *underlying root causes* of diverse students’ surface-level academic and social learning problems. The investigative analysis of educators’ entrenched deficit thinking regarding students’ learning capabilities and their resultant lax and ineffective

instructional planning attitudes and behaviors can then enable school change agent leaders to zoom in on these educator deficiencies as a specific *problem of professional practice* that can be addressed through the design and implementation of one or more targeted intervention programs focused on reframing and rejuvenating teachers' instructional team planning and classroom-based teaching practices. Carefully developed data analysis-informed and school improvement literature-supported *design-based professional learning intervention programs*—like the multi-week targeted professional learning program developed and implemented by the campus principal and his intervention task force colleagues in the Marroquin East High School case study profiled in this report—offer opportunities for school improvement leaders to move beyond relying solely on short-sighted and predictably ineffective surface-level “band-aid” approaches to dealing with persistent student-learning problems. Moving beyond these quick-fix approaches, school improvement leaders can focus directly on developing and implementing “targeted intervention programs” that provide identified groups of teachers with a structured series of *new knowledge acquisition modules* and intensive *immersive team-learning experiences* that have the power to transform educators' pedagogical thinking and demonstrably expand grade-level teacher teams' instructional planning practices through helping teachers learn how to meaningfully integrate multilingual and culturally sensitive interactive teaching/learning strategies into their team-centered interdisciplinary instructional unit planning.

Collective results and findings emerging from the implementation of the Marroquin East High School Instructional Improvement Intervention Program provided some positive evidence supporting the effectiveness of employing a *design-based intervention methodological approach* to instructional improvement in highly diverse school settings—a multi-leveled data analysis-informed approach that empowers change agent leaders to systematically investigate the underlying root causes of diverse students' persistent learning deficiencies through identifying and addressing educators' own entrenched “problems of professional practice”. Notably, principal Becerra and his intervention task force colleagues were able to share the results and findings associated with their own campus-based PD intervention program implementation with other Marroquin-Seguro Metropolitan School District leaders who are envisioning turnkeying this kind of *design-based intervention* school improvement approach as a systematic, practical means for addressing similar student-learning problems and teacher instructional planning deficiencies in other elementary and secondary schools within their district.

DISCUSSION

This section provides a literature-informed discussion of the expanded learning dividends to educators and their 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 Marroquin East High School case study profiled above. The section is divided into two sub-sections addressing how campus-based leaders can enact demonstrable instructional improvement on their campuses through: 1) leveraging the catalyzing power of authentic data teaming and immersive professional learning to design and deliver targeted intervention programs that can refocus and invigorate educators' bilingual instructional planning and classroom teaching practices; and 2) utilizing

multileveled data analysis procedures in tandem with design-based intervention methods as powerful *change agency tools* for nurturing a culture of transformative instructional improvement for multilingual learners in high-diversity school districts.

Leveraging the Catalyzing Power of Authentic Data Teaming and Immersive Professional Learning to Invigorate Educators' Bilingual Instructional Planning and Classroom Teaching Practices

Participating teachers' (i.e., core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers) collective involvement in the five-week *Marroquin East High School Instructional Improvement Intervention Program* provided strong evidence of the positive dividends that can accrue to learning stakeholders in high-diversity schools and school districts when change agent leaders work intentionally to leverage the transformative power of *authentic data teaming* in combination with *immersive professional learning* to: 1) change educators' ingrained pedagogical beliefs and deficit instructional thinking; and 2) jumpstart and invigorate educators' bilingual/multilingual, cross-disciplinary instructional team planning and classroom teaching practices. Notably, when change agent leaders—such as campus principals, assistant principals, instructional coaches and other instructional support specialists—take sufficient time to learn about and coach grade-level teams of teachers on how to collaborate meaningfully in purposeful and authentic data teaming, teachers can become better positioned to be able to engage in rigorous, data-specific teaming practices and experience together the multiple learning dividends that can accrue to both teachers and their students of mining and analyzing students' learning assessment data as a means to inform their bilingual instructional teaming planning and classroom teaching practices. In particular, as Marroquin East High School (EHS) teachers became involved in the immersive learning “biliteracy instructional unit development” project activities during Week Two of the Marroquin EHS PD intervention program, teachers began to gain a better and more in-depth understanding of what *authentic data teaming* is really all about. Rather than engaging in the kind of “PLC lite” efforts that so often counts for “data teaming” in many schools and school districts (Dufour & Reeves, 2016), participating teachers in the Marroquin EHS intervention program gained in-depth experience in how to: 1) intentionally engage in purposeful “deep data digs” and careful analyses of students' learning assessment data; and then 2) leverage the results of those data analyses to directly inform teachers' *multi-linguistic, cross-curricular instructional planning*. Collectively, teachers' structured immersive learning experiences within the Marroquin EHS intervention program's “biliteracy instructional unit development” project: 1) helped teachers gain a hands-on understanding of how root-causal student data analysis could be used as an effective means to help teacher teams pinpoint data-supported *inhibiting factors* impeding individual emergent bilingual students' academic biliteracy development; and 2) showed teachers how they could purposefully leverage the results of their root-causal analyses of students' disaggregated assessment data to actively inform and guide their own grade-level team's *collaborative data conversations* about bilingual, cross-curricular instructional unit planning.

The results and findings emerging from the Intervention Program intervention efforts reported in this article point to a number of identifiable key benefits that can accrue to professional educators in teaching

and learning organizations—such as in the Marroquin East High School setting—through developing and integrating well-crafted and intensive *immersive learning experiences* into the organization’s professional development (PD) programs for teaching personnel. First, these kinds of immersive learning PD experiences are by their very nature *high-engagement* learning opportunities for educator participants. Core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers from each grade level on the Marroquin EHS campus who participated during Week Two of the Intervention Program in the *immersive biliteracy team-learning project* engaged together in “authentic data teaming” in a very hands-on, in-depth way to design, plan, and then implement a complete “bilingual, interdisciplinary instructional unit” in their classrooms. This kind of hands-on, fully immersive “instructional unit” project development effort focused participating teachers on taking the new content knowledge and skills related to multilingual learning and whole literacy development they had recently acquired during Week One of their campus’s Intervention Program and collaborating together as grade-level planning teams to effectively *integrate* this new knowledge into the design of a bilingual-centered interdisciplinary instructional unit that they would then fully implement in their classrooms. Second, immersive learning PD experiences of the kind included in the Marroquin EHS Intervention Program serve to cultivate critical relational bonds and nurture a strong sense of camaraderie across multiple generations of educators. Marroquin teachers participating in the various sets of immersive learning experiences (i.e., the bilingual, interdisciplinary unit development project during Week Two and the series of peer observation/coaching and collegial mentoring cycles during Weeks Three through Five) included as integral components of the intervention design developed enhanced feelings of *mutual trust* and *expanded collegiality* as they collaborated in these intensive “team learning” activities during the course of the five-week Intervention Program. Third, the sets of immersive learning PD experiences served to demonstrably expand and enhance teacher participants’ individual and group learning capacities. Fourth, the Marroquin East High School’s intervention program design helped reinforce in teacher participants’ minds the extent to which “peer coaching and collegial mentoring” are essential components of meaningful, long-term individual and team professional learning. And, finally, a fifth benefit of embedding well-crafted immersive learning PD experiences into intervention programs is that participants gain deep understandings and new appreciation for the multiple ways in which these kinds of experiences can promote a group’s overall “communal learning success”. Collectively, these five key benefits of “immersive learning PD” underscore the usefulness to change agent leaders of intentionally working as part of their school-based instructional improvement intervention program design efforts to leverage the catalyzing power of *authentic data teaming* in tandem with well-crafted, interactive and hands-on *immersive professional learning experiences* to substantively expand their school personnel’s individual and team-centered professional learning.

Utilizing Multileveled Organizational Analysis and Design-Based Intervention Methodology as Change Agency Tools for Nurturing a Culture of Transformative Instructional Improvement for Multilingual Learners in High-Diversity School Districts

Principal Javier Becerra recognized midway into his first year as principal of Marroquin East High School the futility of trying to use outside regional education service consultants as a kind of “quick-fix” PD implementation strategy to attempt to change Marroquin EHS teachers’ entrenched negative attitudes regarding the learning capabilities of the campus’s large populations of emergent bilingual students. This recognition was the catalyst that led this principal to boldly embrace the necessity of spearheading a major multileveled analysis of his campus as a teaching and learning organization. With assistance from the author (serving in the role of a university-affiliated design-based school improvement consultant), principal Becerra assembled some of the most forward-thinking administrators and teachers on his campus to form a campus-wide *Teaching and Learning Equity Intervention Task Force (ITF)* to work systematically to tackle his campus’s persistent “immigrant/emergent bilingual student population achievement gap” problem. Through engaging together in careful analyses of multiple kinds of organizational data (e.g., student-learning assessment data; observations of grade-level PLC instructional team planning meetings; perspectivist data collected during teacher focus group interviews), Becerra and his ITF colleagues were able to uncover a fully data-supported, deep-structural “Problem of Professional Practice” involving Marroquin EHS educators themselves that was found to be fueling the campus’s surface-level student-learning performance issues. This “professional practice” problem identified by Becerra and his ITF colleagues centered on the unaddressed entrenched deficit thinking mindsets, lackadaisical instructional team planning behaviors, and ineffective classroom teaching practices of the campus’s ninth through twelfth grade-level teams of core content teachers, Spanish heritage language teachers, and other bilingual education–certified teachers, which were serving in aggregate as the underlying root cause of the teaching and learning inequities and persistent student learning performance gaps plaguing the campus. Principal Becerra and his task force team members were able to clearly articulate this data analysis–informed root-causal professional practice problem involving educators on his campus in the task force’s **reframed (low inference) Problem of Professional Practice rationale statement** for Marroquin East High School: *Marroquin East High School’s core content teachers’ potential for developing their authentic data teaming practices has been stymied due to their ingrained deficit thinking–driven pedagogical mindsets and instructional planning attitudes that have grown more and more entrenched over time regarding the perceived limited biliteracy learning capabilities of the populations of immigrant/emergent bilingual learners and other Hispanic student sub-groups on this campus. These teachers’ deficit mindsets and instructional planning attitudes, in fact, collectively constitute an underlying root-causal ‘problem of professional practice’ that has negatively impacted the overall teaching and learning culture at Marroquin East HS. Thus, teams of core content teachers in ninth through twelfth grades are in need of a targeted professional development (PD) intervention program to help these teachers: 1) critically examine their lack of practical knowledge regarding emergent bilingualism and associated misunderstandings regarding the learning capabilities of EB students; and 2) increase their competency levels and proficiencies in being able to engage together with Spanish heritage and dual language teachers in authentic data teaming to design and deliver multi-linguistic, cross-curricular instructional units in the core content areas (English/language arts, math,*

science, and social studies) that can provide immigrant/EB and other diverse learners with meaningful, high-engagement ‘biliteracy’ interactive and immersive classroom learning opportunities.

The collective set of iterative activities engaged in by principal Becerra and his intervention task force colleagues—i.e., the systematic, multileveled data analysis efforts and review of relevant instructional planning and school improvement literatures that led to the identification of an underlying, root-causal problem involving educators’ professional practice and the subsequent formulation of a targeted intervention program to address the deficit thinking mindsets and ineffective instructional planning and teaching practices of Marroquin East High School teachers— captures well the overall process of *educational design research thinking and action* as it can be effectively implemented by campus-based change agent leaders in real-world school settings. As Tjeerd Plomp explains in describing the educational design research approach: “...educational design research is the systematic study of designing, developing, and evaluating educational interventions (such as programs, teaching-learning strategies and materials, products and systems) *as solutions to complex problems in educational practice* [emphasis added], which also aims at advancing our knowledge about the characteristics of these interventions and the processes of designing and developing them....By its nature, design research is relevant for educational practice (and therefore also for educational policy) as it aims to develop research-based solutions for complex problems in educational practice. Starting points for design research are educational problems for which no or only a few validated principles (‘how to do’ guidelines or heuristics) are available to structure and support the design and development activities. Informed by prior research and review of relevant literature, *researchers in collaboration with practitioners design and develop workable and effective interventions* [emphasis added] by carefully studying successive versions (or prototypes) of interventions in their target contexts, and in doing so they reflect on their research process with the purpose to produce design principles.” (Plomp, 2010, p. 13). From a very practical change agent leadership school improvement perspective, principal Becerra and his Marroquin EHS intervention task force colleagues’ sustained efforts in engaging in hands-on, data-informed turnaround instructional improvement and campus-wide cultural change through conducting intensive data mining and analysis operations followed by purposively designing, developing, and implementing a targeted intervention program to directly address teachers’ pedagogical knowledge and bilingual instructional planning skill deficits reflects the essence of what design-based school improvement is all about. In short, principal Becerra and his colleagues focused their organizational change agent thinking and actions on *designing instructional improvement* for teachers and students in ways that could create new expanded interactive learning opportunities for multiple groups of diverse learners on the Marroquin East High School campus. Through engaging as a campus-based *instructional improvement team* in intensive organizational diagnoses of their school’s “surface-structure” persistent student-learning problem (i.e., the challenge of closing the achievement gap for the campus’s large population of immigrant/emergent bilingual students) and underlying, root-causal (i.e., “deeper structure”) professional practice problem involving educators (i.e., grade-level teachers’ deficit thinking mindsets and resultant lackadaisical instructional planning practices in response to the perceived limited learning capabilities of immigrant/emergent bilingual students),

principal Becerra and his ITF colleagues were able to *systematically and analytically identify* the underlying, “teacher-centered” root cause of their campus’s student-learning achievement gap problem and develop and implement a targeted Intervention Program to directly address this root-causal problem. Most importantly, this intervention effort involved immersing Marroquin EHS teachers in a series of new content knowledge PD sessions and related team-learning intervention project activities through which these teachers were able to recognize and reflect on their pedagogical deficit thinking and restructure their instructional planning and classroom teaching practices to positively benefit the academic learning development of their culturally and linguistically diverse students.

Ultimately, the turnaround instructional improvement work completed by principal Becerra and his campus improvement team colleagues in the Marroquin East High School Case Study was all about *changing educators’ beliefs*. It was only through engaging together in the iterative process of direct immersion in the intervention program’s project-based learning activities followed by implementation of the new bilingual interdisciplinary units in their classrooms supported by teacher-led peer observation/coaching and collegial mentoring cycles were Marroquin EHS teachers able to navigate through the cathartic process of recognizing/reflecting on their original deficit thinking and then taking ownership themselves in the process of changing their instructional planning and teaching practices in ways that could positively support the learning needs of their students. As a result of their participation in the Marroquin EHS Instructional Improvement Intervention Program, both the school’s change agent leaders and participating teachers came to a new realization that the school’s “problem”, in fact, was not the learning achievement gaps exhibited through various student learning assessment measures by the campus’s culturally and linguistically diverse students. The real problem that needed to be addressed—and that could only be solved by the campus’s educators themselves—was the need for Marroquin EHS teachers to work together as professional learning teams *to change their own beliefs and practices*. As Rick Mintrop asserts: “The achievement gap is a huge problem in the United States and elsewhere. But [school leaders] have to realize that the “gap” is not a problem of practice, but the result of many practices, and this result is indicated by a measurable achievement gap. Indicators point to problems, but are not the problem of *practice*. No designed intervention can close the achievement gap directly; educators can only change beliefs, attitudes, or practices that may eventually be registered on the indicator. School and district leaders have the strongest influence on adults, not students. So leaders’ problem of practice should focus on beliefs, attitudes, or practices of adults who are members of, or associated with, their organization.” (Mintrop, 2016, p. 66). It is a testament to the sustained commitment and determination of the multiple grade-level teams of educators who participated actively in the multi-week Marroquin East High School Instructional Improvement Intervention Program—along with the change agent leaders and facilitators who guided them—that these Marroquin EHS educators were able to successfully address their identified problem of professional practice through *working intentionally to change their pedagogical beliefs and instructional behaviors* to create together a new culture of multilingual learning for all diverse learning stakeholders on their metropolitan high school campus.

CONCLUSION

This article has sought to highlight the daunting “change agent challenges” school leaders face in high-diversity metropolitan school districts who are tasked with navigating the multileveled instructional improvement dilemmas associated with working to close the learning performance achievement gaps of large populations of immigrant/emergent bilingual and other diverse students populating their district’s campuses and classrooms. In particular, the metropolitan high school case study presented and discussed in this article report focused on demonstrating how school leaders who have failed repeatedly in attempting to tackle these kinds of instructional improvement dilemmas through traditional staff development deployment means can embrace *educational design research thinking* and associated *intervention program design development and implementation strategies* as practical and useful design-based methodologies to directly address and solve their persistent and seemingly intractable instructional improvement challenges. The high school campus principal and his intervention task force colleagues were able to directly apply design-based thinking principles and procedures—that is, engage together in multileveled analyses of their campus’s student-learning performance assessment and other related student demographic profile data in conjunction with incisive analyses of educator perspectivist data gleaned from multiple observations of grade-level teacher team planning meetings and group interviews with teachers—to move beyond a simple surface-structure analysis of their campus’s student-learning problem to identify the underlying root-causal problem of professional practice involving teachers themselves. Through utilizing design-based analytic procedures to arrive at a more fully data-informed understanding of how teachers’ own deficit pedagogical thinking and self-limiting instructional planning behaviors were paralyzing their own efforts to meet the learning support needs of the linguistically and culturally diverse students in their classrooms, the principal and his task force colleagues were able to design and implement a literature-supported, multi-week instructional improvement intervention program that was intentionally designed to change teachers’ pedagogical mindsets and instructional planning and teaching practices through their participation in a series of carefully structured new content knowledge acquisition PD modules and immersive project-learning activities. Teachers’ collective participation in the intervention program’s “bilingual, interdisciplinary instructional unit planning project activities” and subsequent series of classroom-based instructional unit implementation “peer observation/coaching and collegial mentoring cycles” enabled teams of teachers to gain hands-on experience in integrating their newly acquired *multilingual learning support* concepts and skills into their own team-centered instructional planning efforts and classroom teaching practices.

Results and findings emerging from the Marroquin East High School Case Study provided some strong positive evidence for the practical usefulness of employing design-based research and intervention program development methods to address the persistent learning improvement disparities involving large populations of immigrant/emergent bilingual students in high-diversity school districts. The design-based interventionist methodologies employed by the principal and his change agent colleagues in the Marroquin EHS case study enabled them to design and implement a targeted PD intervention program that focused directly on jumpstarting educators’ own *multilingual, interdisciplinary*

instructional team planning and classroom-based interactive teaching practices as a means to expand the core content interactive peer-learning engagement and academic learning performance of their campus's diverse population of multilingual student learners. Perhaps most importantly, the results and findings of the Marroquin EHS case study demonstrate how change agent leaders working in high-diversity metropolitan school districts can leverage design-based research thinking and intervention design methods as powerful "change agency tools" to move beyond relying solely on short-sighted and predictably ineffective surface-level "band-aid" approaches to dealing with persistent student-learning problems to focus directly on providing identified groups of teachers with opportunities for *new knowledge acquisition* and *immersive team-learning experiences* that have the capacity to transform educators' pedagogical thinking and demonstrably expand grade-level teacher teams' instructional planning practices. Through confronting directly their instructional improvement dilemma challenges—as the Marroquin East High School leaders did—and adopting design-based improvement methods centered on helping teachers learn how to meaningfully integrate multilingual and culturally sensitive interactive teaching/learning strategies into their team-centered interdisciplinary unit planning and classroom instructional practices, change agent leaders working in a variety of high-diversity school district contexts may discover that they too can also nurture and sustain positive "professional teaching/learning cultures" on their own campuses and in their own school districts through focusing their efforts squarely on helping their teachers learn how to embrace principles and practices of *transformative, multilingual-centered instructional improvement* that can effectively support the social and academic learning needs of all linguistically and culturally diverse learners.

Acknowledgments

The author would like to acknowledge the steadfast commitment and determination 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' willingness to participate wholeheartedly in the multi-week intervention program designed and implemented by the campus's instructional improvement leaders serves as a testament to the bravery and openness of these groups of grade-level teachers to examining their own self-limiting deficit pedagogical thinking and expanding the boundaries of their team-centered professional learning in transformative ways that resulted in enabling these teachers to reinvent and reinvigorate their *multilingual-centered instructional teaming practices* for the benefit of all 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.

REFERENCES

- Bernhardt, V. L. (2013). *Data analysis for continuous school improvement*. New York: Routledge.
<https://doi.org/10.4324/9781315813356>
- Blanc, S., Christman, J., Lin, R., Mitchell, C., Travers, E., & Bulkey, K. (2010). Learning to learn from data: Benchmarks and instructional communities. *Peabody Journal of Education*, 85(2), 205-225. <https://doi.org/10.1080/01619561003685379>
- Boudett, K. P., City, E. A., & Murnane, R. J. (Eds.). (2010). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*. Cambridge, MA: Harvard Education Press.
- Bouwman, M., Runhaar, P., Wesselink, R., & Mulder, M. (2017). Fostering teachers' team learning: An interplay between transformational leadership and participative decision-making. *Teaching and Teacher Education*, 65, 71-80. <https://doi.org/10.1016/j.tate.2017.03.010>
- Bowers, A. J., Shoho, A. R., & Barnett, B. G. (Eds.). (2014). *Using data in schools to inform leadership and decision making*. Charlotte, NC: Information Age Publishing.
- Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question, and some other matters. *Working Papers on Bilingualism*, 19, 121-129.
- Cummins, J. (1981). *Bilingualism & minority language children*. Toronto: Ontario Institute for Studies in Education.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, UK: Multilingual Matters. <https://doi.org/10.21832/9781853596773>
- Cummins, J. (2021). *Rethinking the education of multilingual learners: A critical analysis of theoretical concepts*. Bristol/Blue Ridge Summit, UK: Multilingual Matters. <https://doi.org/10.21832/9781800413597>
- de Jong, E. J., & Harper, C. A. (2005). Preparing mainstream teachers for English-language learners: Is being a good teacher good enough? *Teacher Education Quarterly*, 32(2), 101-124.
- Dufour, R., Dufour, R., Eaker, R., & Karhanek, G. (2004). *Whatever it takes: How professional learning communities respond when kids don't learn*. Bloomington, IN: Solution Tree Press.
- Dufour, R., Esker, R., Many, T. W., & Mattos, M. (2016). *Learning by doing: A handbook for professional learning communities at work* (3rd ed.). Bloomington, IN: Solution Tree Press.
- Dufour, R., & Fullan, M. (2013). *Cultures built to last: Systemic PLCs at work*. Bloomington, IN: Solution Tree Press.

- Dufour, R., & Reeves, D. (2016, March). The futility of PLC lite. *Phi Delta Kappan*, 97(6), 69-71.
<https://doi.org/10.1177/0031721716636878>
- Dweck, C. S. (2016). *Mindset: The new psychology of success*. New York: Random House.
- Echevarria, J., & Vogt, M. E. (2010). Using the SIOP model to improve literacy for English learners. *New England Reading Association Journal*, 40(1), 8-15.
- Echevarria, J., Vogt, M. E., & Short, D. J. (2017). *Making content comprehensible for secondary English learners: The SIOP model*. Boston, MA: Pearson.
- Ende, F. (2016). *Professional development that sticks: How do I create meaningful learning experiences for educators?* Alexandria, VA: Association for Supervision and Curriculum Development.
- Griner, A. C., & Stewart, M. L. (2012). Addressing the achievement gap and disproportionality through the use of culturally responsive teaching practices. *Urban Education*, 48(4), 585-621.
<https://doi.org/10.1177/0042085912456847>
- Hill, T. D. (2024). *The instructional leader's guide to closing achievement gaps: Five keys to improving student outcomes*. Arlington, VA: Association for Supervision and Curriculum Development.
- Kelly, A. E. (2010). When is design research appropriate? (pp. 73-84). In *An Introduction to Educational Design Research*. Proceedings of the seminar conducted at the East China Normal University, Shanghai (PR China), November 23-26, 2007.
- Kennedy, E., & Jones, L. (2015). *A guide to data-driven leadership in modern schools*. Charlotte, NC: Information Age Publishing.
- Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016). Culturally responsive school leadership: A synthesis of the literature. *Review of Educational Research*, 86(4), 1272-1311.
<https://doi.org/10.3102/0034654316630383>
- Krečič, M., & Grmek, M. (2008). Cooperative learning and team culture in schools: Conditions for teachers' professional development. *Teaching and Teacher Education*, 24(1), 59-68.
<https://doi.org/10.1016/j.tate.2007.02.011>
- Lachat, M. A., & Smith, S. (2005). Practices that support data use in urban high schools. *Journal of Education for Students Placed at Risk*, 10(3), 333-349.
https://doi.org/10.1207/s15327671espr1003_7

- Lieberman, A., Miller, L., Roy, P., Hord, S. M., & Frank, V. V. (2014). *Learning Communities: Reach the highest standard in professional learning*. Thousand Oaks, CA: Corwin Press / Sage Publications.
- Love, N. (Ed.). (2009). *Using data to improve learning for all: A collaborative inquiry approach*. Thousand Oaks, CA: Corwin Press.
- Love, N., Stiles, K., Mundry, S., & DiRanna, S. (2008). *The data coach's guide to improving learning for all students: Unleashing the power of collaborative inquiry*. Thousand Oaks, CA: Corwin Press.
- Mandinach, E. B. (2012). A perfect time for data use: Using data-driven decision making to inform practice. *Educational Psychologist*, 47(2). <https://doi.org/10.1080/00461520.2012.667064>
- Mandinach, E. B., & Honey, M. (Eds.). (2008). *Data-driven school improvement: Linking data and learning*. New York: Teachers College Press.
- Mandinach, E. B., & Jackson, S. S. (2012). *Transforming teaching and learning through data-driven decision making*. Thousand Oaks, CA: Corwin Press. <https://doi.org/10.4135/9781506335568>
- Martinez, M. R., & McGrath, D. (2014). *Deeper learning: How eight public schools are transforming education in the twenty-first century*. New York: The New Press.
- Marzano, R. J., Heflebower, T., Hoegh, J. K., Warrick, P., & Grift, G. (2016). *Collaborative teams that transform schools: The next step in PLCs*. Bloomington, IN: Marzano Research.
- McKenney, S., & Reeves, T. C. (2012). *Conducting educational design research*. New York: Routledge. <https://doi.org/10.4324/9780203818183>
- Mintrop, R. (2016). *Design-based school improvement: A practical guide for education leaders*. Cambridge, MA: Harvard Education Press.
- Murphy, J. (2016). *Creating instructional capacity: A framework for creating academic press*. Thousand Oaks, CA: Corwin Press. <https://doi.org/10.4135/9781483386003>
- Plomp, T. (2010). Educational design research: An introduction. In T. Plomp & N. Nieveen (Eds.), *An Introduction to Educational Design Research*. Proceedings of the seminar conducted at the East China Normal University, Shanghai (PR China), November 23-26, 2007.
- Plomp, T., & Nieveen, N. (Eds.). (2010). *An Introduction to Educational Design Research*. Proceedings of the seminar conducted at the East China Normal University, Shanghai (PR China), November 23-26, 2007.

- Porter, H. J. (2024). *Intentional co-teaching for multilingual learners: An equitable approach to integrating content and language*. Baltimore, MD: Paul H. Brookes Publishing.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155-169. <https://doi.org/10.1007/BF01405730>
- Stringer, P. (2013). *Capacity Building for School Improvement: Revisited*. Boston, MA: Sense Publishers. <https://doi.org/10.1007/978-94-6209-329-4>
- Supovitz, J. A., & Klein, V. (2003). Mapping a course for improved student learning: How innovative schools systematically use student performance data to guide improvement. Philadelphia, PA: Consortium for Policy Research in Education. <https://doi.org/10.1037/e382752004-001>
- Texas Education Agency (August 2024). *Enrollment in Texas Public Schools 2023-24*. (Document No. GE24 601 06). Division of Research and Analysis, Office of Operations. Texas Education Agency, Austin TX. <https://tea.texas.gov/reports-and-data/school-performance/accountability-research/enroll-2023-24.pdf>
- van den Akker, J., McKenney, S., & Nieveen, N. (2006). Introduction to educational design research. In J. van den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds.), *Educational Design Research* (pp. 67-90). London: Routledge. <https://doi.org/10.4324/9780203088364>
- Venables, D. R. (2011). *The practice of authentic PLCs: A guide to effective teacher teams*. Thousand Oaks, CA: Corwin. <https://doi.org/10.4135/9781452219653>
- Venables, D. R. (2014). *How teachers can turn data into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- White, S. H. (2011). *Beyond the numbers: Making data work for teachers and school leaders*. Englewood, CO: Lead and Learn Press.
- Zwiers, J. (2024). *Overhauling learning for multilingual students: An approach for achieving pedagogical justice*. Thousand Oaks, CA: Corwin Press.