

Turnaround Instructional Leadership in a High Diversity Urban School District: Instituting a Multilingual, Cross-Curricular Teaming Initiative for Secondary Teachers to Address the Biliteracy Academic Development Needs of Emergent Bilingual Learners

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Abstract

Addressing the unique biliteracy academic development needs of emergent bilingual learners is an increasingly prevalent challenge confronting many school district leaders in the United States. This article profiles how one lead instructional coach and her instructional improvement team colleagues working in a high diversity urban high school employed a design research methodological approach anchored in the design-based school improvement literature to: 1) investigate the underlying root causes of emergent bilingual students' persistent learning deficiencies; and 2) develop and implement a design-based professional development intervention program for their campus's secondary educators to address teachers' pedagogical deficit thinking and refocus their team-centered instructional planning and classroom teaching practices. Literature-supported insights derived from an analysis of collective design-based instructional improvement efforts completed by change agent leaders in the urban high school case situation are presented and discussed within three areas: 1) addressing the unique academic development needs of emergent bilingual learners in high diversity school districts; 2) developing secondary teachers' multilingual, cross-curricular instructional planning capacities through direct immersion in authentic data teaming; and 3) nurturing school-wide distributed leadership cultures of academic success for emergent bilingual learners in secondary campuses anchored in dual language instructional planning and professional learning community-embedded coaching teams. Finally, a set of design principles derived from the case study is presented that may be of practical use to school leaders interested in exploring innovative intervention solutions to persistent instructional improvement challenges associated with closing the achievement gaps for diverse learners in their urban school districts.

Key Words: emergent bilingualism; educational design research methodology; teacher deficit thinking; multilingual, cross-curricular instructional teaming

Introduction

School improvement leaders working in public school districts throughout the United States, especially in states such as Texas, New York, and California that are experiencing large annual influxes of new immigrant populations from multiple countries—including new immigrant arrivals from Central American countries like Mexico, El Salvador and Honduras, as well as from India and China and other population-dense countries across the globe—must increasingly deal with the resulting challenges associated with developing and delivering targeted professional development programs to their instructional staff to help teachers address effectively the *biliteracy academic learning development needs* of the growing numbers of emergent bilingual learners entering their classrooms. In the state of Texas, one of the states in the US with the largest populations of immigrant families from multiple countries with school-age children attending public schools, the Texas Education Agency (TEA) recently reported that emergent bilingual (EB) students registered the highest school dropout rate of ten reported demographic groups for the graduating class of 2019. Moreover, over the entire last decade (2011 through 2020), EB students in Texas recorded the highest dropout rate of all demographic groups tracked (Texas Education Agency, 2021).

Scholars in the field of second language acquisition emphasize that elementary and secondary teachers are not adequately prepared to teach culturally and linguistically diverse students (Echevarria & Vogt, 2010; Echevarria et al., 2017). Moreover, other scholars debunk the common misconception widely held by many educators that “good teaching practices” alone can provide emergent bilingual students with needed access to the curriculum in ways that promote effective bilingual content and language learning (de Jong & Harper, 2005). Emergent bilingual students, in fact, have unique linguistic and academic learning challenges that educators must recognize as they engage together in instructional planning and classroom teaching utilizing culturally responsive teaching practices to address EB students’ specific *biliteracy academic development needs* (Griner & Stewart, 2012; Khalifa et al., 2016). Compounding these instructional planning and teaching challenges is the fact that, in many school districts across the United States, district- and campus-level administrators are woefully deficient in possessing the instructional supervisory expertise in *multilingual, cross-curricular instructional planning* to be able to coach teachers and provide them with the kinds of targeted professional development programs teachers need to be able to learn how to modify their routine team-planning practices in ways that can effectively support the specific biliteracy linguistic and academic development needs of emergent bilingual learners.

A new approach to instructional intervention thinking has emerged in recent years in the educational design research literature (Plomp, 2010; Plomp & Nieveen, 2010) that holds considerable promise for education leaders interested in working intentionally in data-informed, creative ways to design and provide teachers with targeted professional development programming to address teachers’ multiple current teaching and learning challenges, including challenges associated with planning instructionally to meet the unique biliteracy academic development needs of diverse emergent bilingual learners. As described by Plomp (2010), “...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 for complex problems in educational practice, which also aims at advancing our knowledge about the characteristics of these interventions and the processes of designing and developing them.” (Plomp, 2010, p. 15) Plomp further elucidates how educational design research *intervention thinking* is especially suitable as a practical approach that instructional improvement change-agent leaders can employ to work directly with other educators in context-specific school situations to address real-world problems of teaching and learning practice: “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. The 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 [can] design and develop workable and effective interventions 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. 15)

Purpose

The high school case study profiled in this article report provides an example of how *design research thinking processes and investigative procedures* can be utilized by a team of instructional improvement leaders to address the persistent learning deficiencies of emergent bilingual students in a high diversity urban school district.

Campus-based educators working in consultation with the author (acting in the role of design-based instructional improvement consultant) in the high diversity urban high school case situation described below engaged together through the course of the school improvement study in designing, developing, and implementing a data analysis-informed, creative *professional development intervention program* for secondary teachers (both core content teachers and Spanish heritage language teachers). The specific focus of the intervention program was to provide teachers with new, literature-supported knowledge and practical skills that could: 1) enable teachers to gain a more informed understanding of the unique cultural and linguistic learning support needs of bilingual students; and 2) change teachers' pedagogical mindsets and instructional teaming behaviors to become open to embracing the advantages of engaging together in new ways as *multilingual, cross-curricular instructional teams* to provide their emergent bilingual and native English-speaking students with enhanced opportunities for shared, cross-cultural peer learning.

Research Methods

The design-based school improvement methods employed in the case study profiled in this article were adapted from design research methods found in the recent education improvement science literature (Plomp, 2010; Plomp & Nieveen, 2010). One particular "practical application" version of design research methods—the *Design-Based School Improvement Logic Model and Operational Steps Process* developed by Rick Mintrop (2016)—was used by the author as the specific operational framework to guide learning improvement leaders participating in the urban high school study described below in engaging together as a "turnaround instructional improvement team" to analyze available student learning assessments in conjunction with multiple sets of teacher observational and perspectivist data to: 1) investigate teachers' routine instructional teaming practices as potential contributors to the persistent "lagging learning performance" problem associated with emergent bilingual students at their high school campus; and 2) use the results of their collective data analyses to guide the improvement team's efforts in developing and implementing a design-based *professional development (PD) intervention program* to provide core content area and Spanish heritage language teachers across ninth through twelfth grades with multiple "new knowledge and skills" PD modules coupled with complementary "peer observation/coaching and collegial mentoring" applied learning activities to reframe and change these teachers' pedagogical mindsets and instructional attitudes regarding the learning capabilities and support needs of their emergent bilingual students and, through doing so, motivate teachers to "think different and work together in new ways" as authentic *multilingual, cross-curricular instructional planning teams*.

In a nutshell, Mintrop's *Design-Based School Improvement Logic Model and Operational Steps Process* (2016) involves helping instructional improvement teams navigate through the following seven practical intervention development steps: 1) generate an *initial (high inference) Student-Learning Problem rationale statement* along with an accompanying *intuitive Theory of Action (If/Then) statement* that reflects educators' perceptions of the apparent "surface-level" student-learning problem(s) currently existing on their campus; 2) conduct an in-depth *Exploratory Needs Assessment (ENA)* through examining multiple kinds of relevant data to identify data-supported areas of strength and weakness in their school's overall teaching and learning practices; 3) use the results of the ENA data analysis work to generate a data-informed and school improvement literature-supported articulation of a *refined (low inference) Problem of Professional Practice* involving educators that may be existing on their campus and potentially fueling students' learning deficiencies; 4) generate a full "composite understanding" of the refined (low inference) Problem of Professional Practice in its full dimensionality through identifying multiple "inhibiting factors" existing that could help explain *why* student-learning performance problems are occurring; 5) develop summary reviews of relevant knowledge bases related to the school's specific instructional improvement problems; 6) generate a *refined Theory of Action (If/Then) Statement* that articulates in practical terms the specific intervention strategies education leaders need to implement that can lead to substantive improvements in teachers' campus-based instructional planning and classroom teaching practices; and 7) construct a *Change Drivers Diagram* that provides a clear visual representation of how school leaders will apply key intervention strategies culled from the school improvement literatures reviewed to address the identified low-inference Problem of Professional Practice and positively advance educators' professional learning. Using their Change Drivers Diagram as an operational roadmap to implement needed change, school leaders—working together as an "instructional improvement design team"—then proceed to develop an *intervention program implementation plan* that includes iterative sets of knowledge and skills development sessions coupled with applied learning activities that educators will participate in to gain new content knowledge and skills to enhance their collective instructional data-teaming and classroom teaching practices.

The process of applying these seven operational steps to guide the context-specific turnaround instructional improvement efforts of a team of educators working in a high diversity urban high school is detailed in the following section.

Urban High School Case Study

The urban high school case study presented in this section includes brief descriptions of the campus organizational context and professional backgrounds and activities of the instructional improvement team members and teacher participants who were involved in the design-based school improvement research activities completed during the study. The case study highlights how instructional improvement leaders, working together as a campus-based intervention team, applied design-based school improvement thinking and operational procedures to develop and pilot implement a data analysis-informed *professional development (PD) intervention program* for multiple core content area and Spanish heritage language teachers as a creative means to address the biliteracy academic learning development needs of emergent bilingual students on their campus. Pseudonyms for the school district and all educators involved in the case study are used throughout.

Turnaround Instructional Leadership at Barneshaven East High School: Building Secondary Teachers' Multilingual, Cross-Curricular Instructional Teaming Capacities to Address the Academic Development Needs of Emergent Bilingual Learners

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

Alejandra Ortega has been a middle school science teacher in Barneshaven-Strockton Independent School District (ISD) for fifteen years. Barneshaven-Strockton ISD is a large urban school district located within a sprawling metroplex in southeast Texas. With an overall student population of 73,000 students, Barneshaven-Strockton ISD serves the learning support needs of multiple diverse student groups, including large percentages of students with Hispanic (Mexican) (53.5%), Latin American (Honduran, El Salvadoran) (7.8%), and African American (11.9%) cultural/ethnic backgrounds. As the first member of her Hispanic family to earn a college degree, Alejandra Ortega—affectionately nicknamed “Ale” by her teacher peers—quickly gained a reputation among her Barneshaven-Strockton colleagues as a dedicated teacher with an unwavering commitment to working steadfastly to ensure that all her students demonstrate meaningful learning progress. Ms. Ortega's students' State of Texas Assessments of Academic Readiness (STAAR) accountability scores on Science End of Course (EoC) exams, including scores for students with limited English proficiency who are in the process of developing their social and academic “second-language acquisition” skills in the English language—a sub-population of students who are classified in the district and across the state as “emergent bilingual” (EB) students, are regularly some of the best scores in the district. Throughout her career as a professional educator, Ale Ortega has been passionate about working intentionally to instructionally plan to meet the learning support needs of all her students, including her emergent bilingual (EB) students, many of whom struggle academically due to their limited English reading and writing abilities.

Recognized by campus and district administrators as an effective instructional leader with a highly successful track record of implementing instructional interventions that meet the learning support needs of emergent bilingual students, Alejandra Ortega was appointed as the new lead instructional coach for Barneshaven East High School for the 2021-22 school year. As the largest high school in the district with 3,200 students, Barneshaven East High School's overall student population includes a significant percentage of students (12.5 percent) who are classified as emergent bilingual (EB) learners. During her initial meetings with Barneshaven-Strockton district administration upon being appointed to her new position, the superintendent and secondary academic program directors for the district's high school campuses made it clear to Ale that she was hired specifically to help the district close the substantial learning performance achievement gaps in all core academic content areas between Hispanic students (especially, native Spanish speakers) and White Anglo (non-Hispanic) students. In particular, the superintendent emphasized that his expectation was that Ortega would focus her instructional improvement efforts on providing coaching support to teachers on how to design and implement targeted instructional interventions for the district's sizeable population of immigrant students who are English language learners with limited English proficiency and who are thus classified by the state's Texas Education Agency as *emergent bilingual (EB) learners*. The superintendent explained that all districts in Texas have a mandate from the state to effectively educate *all* students enrolled in the district.

However, according to the superintendent, these Hispanic immigrant, emergent bilingual students in the district's high schools were consistently scoring fifteen to twenty percent lower than non-Hispanic student groups on End of Course exams in core content classes (English/language arts, math, science, and social studies) and, as a result, were pulling down the district's secondary campuses' State of Texas Assessments of Academic Readiness (STAAR) scores and negatively impacting the district's overall student performance accountability ratings on the state's annual Texas Academic Performance Reports (TAPR) for the district. From her experiences as a middle school science teacher in the district, Ale Ortega immediately understood the nature of the district's "student-learning problem" the superintendent was describing. The district has a responsibility to address the unique multilingual learning support needs of the substantial population of immigrant English language learners enrolled in the district's educational programs. By the time these immigrant, native Spanish-speaking students reach the high school campuses, their insufficient progress in acquiring English language skills dramatically affects their ability to succeed academically. Thus, the district must find creative ways to address the *specific multilingual learning support needs* of emergent bilingual students whose English language acquisition progress has stalled or has even "frozen" during the five to six years these students have been in the district. These emergent bilingual students are consistently underperforming on End of Course exams in academic core content courses and are also not demonstrating expected linguistic proficiency growth on the Texas English Language Proficiency Assessment System (TELPAS), the required federal assessment system that measures linguistic development of emergent bilingual learners in the four areas of listening, speaking, reading, and writing. As the newly hired lead instructional coach for the district's largest high school, these emergent bilingual students' *lack of biliteracy academic learning progress* is the specific "student-learning problem" the district has just hired Ale Ortega to address.

Based on her initial conversations with district administrators and her review of available district- and campus-level disaggregated student-learning data, Ale Ortega was able to formulate the **initial (high inference) "student-learning problem"** at Barneshaven East High School she was hired to address: *Emergent bilingual (EB) students in the English as a Second Language (ESL) Program at Barneshaven East High School have plateaued in their learning and are demonstrating stagnant learning performance growth on English language proficiency assessments and on core content area learning accountability measures. Moreover, overall graduation rates for these EB students are significantly lower than average when compared with other student sub-populations in Barneshaven-Strockton Independent School District. Thus, the immediate student learning improvement need area at Barneshaven East High School is to significantly accelerate these EB students' multilingual learning in the core content areas (English/language arts, math, science, and social studies) that are tested by the state.* Based on this student-learning problem logic, Ortega was able to clearly envision the immediate "turnaround leadership challenge" she was confronted with in her new position: *How do I provide secondary core content area teachers and Spanish heritage language teachers with the focused instructional coaching support they need to be able to engage together in data-informed multilingual team planning to design and deliver effective instructional interventions to meet the biliteracy learning support needs of emergent bilingual students?* From this change agent leadership thinking, Ale Ortega was then able to construct the following **intuitive If/Then operational statement**: *If I work intentionally with my team of instructional coaches to deliver 'multilingual teaming coaching support' to teachers, then core content area teachers will learn how to engage together with Spanish heritage language teachers in their weekly grade-level professional learning community (PLC) meetings to plan and implement multilingual, cross-curricular instructional units and lessons that can effectively address the biliteracy learning needs of the campus's emergent bilingual students.*

Ortega's responsibilities as Barneshaven East High School's new lead instructional coach included leading a team of five content-area instructional coaches who meet on a weekly basis with teams of teachers in their grade-level Professional Learning Community (PLC) planning groups. During these weekly PLC planning meetings, the content-area instructional coaches work to assist teachers in: 1) analyzing student disaggregated data to identify learning deficiencies associated with individual students and groups of students; and 2) leveraging the results of disaggregated data analyses to directly inform teachers' interdisciplinary instructional unit planning and assessment practices. Excited about the opportunities her new position offered for collaborating with teachers in an in-depth way to support teachers' overall instructional planning efforts to meet the learning development needs of EB students, Ale Ortega scheduled an "instructional coaching PLC support" orientation meeting at the beginning of the 2021-22 school year for her team of content-area instructional coaches and all Barneshaven East High School's secondary grade-level core content teachers and Spanish heritage language teachers. At this meeting Ortega shared with everyone her vision for *multilingual teaming for EB learner success*.

In a nutshell, Ale Ortega's vision for multilingual teaming involves a "cross-language instructional planning" collaborative approach in which Spanish teachers teaching heritage language classes for EB students (such as "Spanish for Spanish Speakers") team up with regular education teachers teaching core content classes for native English students (such as "English/Language Arts") to engage together in *cross-curricular language instructional planning*. This kind of cross-curricular multilingual teaming design involves Spanish and English teachers working together intentionally to: 1) analyze EB students' English language acquisition development needs; and then 2) based on the specific need areas identified, design "dual-language instructional units" (to be delivered in both Spanish and English) in English/Language Arts and other core content areas (math, science, social studies) that can accelerate EB students' successful *biliteracy* academic development. Ale Ortega firmly believes that this creative approach to multilingual instructional teaming is key to ensuring effective academic learning support for second language acquisition students at Barneshaven East High School.

Initial reactions of the instructional coaches and grade-level teachers to Ale Ortega's "multilingual teaming" vision were generally positive. However, as the 2021-22 school year got underway and the middle of the first nine weeks arrived, Ale Ortega began to pick up clear signs that teachers' initial openness to learning about tools and strategies for developing their multilingual teaming capacities to meet the learning needs of the campus's EB students may have been more of an initial polite reaction than a genuine embrace of Ale's multilingual teaming ideas. As the new year progressed, Ale Ortega began to realize that teachers at this high school campus, in fact, may simply have been paying "cordial lip service" to Ale's instructional planning ideas during the initial instructional coaching/PLC support meetings to humor a new colleague rather than expressing genuine enthusiasm for embracing the idea of *authentic* multilingual teaming as a creative strategy for improving the overall learning performance of Barneshaven East High School's "second language acquisition" emergent bilingual students.

As Ale continued her practice during the fall of 2021 of regularly attending grade-level teachers' weekly PLC meetings, several core content teachers—many of them veteran teachers who have been teaching in the district for fifteen or more years—began to voice their objections to the additional work that "multilingual teaming" required of them. For example, Elliot Harington, a STEM biology teacher who has been teaching at Barneshaven East High School for 18 years, expressed his skepticism about the practical usefulness of multilingual teaming directly to Ale during one of their tenth-grade PLC planning meetings: *We need to recognize the reality of the situation here. For the most part, the parents of the emergent bilingual students sitting in our classes are uneducated immigrants who don't speak English. So, the parents of these EB students are not going to be able to help their kids with academic content. These parents are working two, maybe three, jobs per week to try to earn enough money to survive and provide basic necessities for their families. Do these parents even appreciate the value of an education? When I ask these students what their life goal is they say they want to become a foreman of a crew of workers rather than just be a crew member. That's their 'highest ambition'—that's all they know. With that kind of attitude, it's simply not reasonable to expect that these students would even bother to work hard in my biology class.* Another core content teacher, Amanda Gaines, who teaches tenth- and eleventh-grade algebra, expressed her concerns even more bluntly: *These EB kids are rude and just plain lazy. It's so evident to me that they don't really want to learn. I can't teach math content when I must continually stop and try to get these kids to pay attention. And besides that, these kids are constantly talking to each other in Spanish! I don't want students speaking Spanish in my math class and joking around with each other. I have no idea what they are saying. For all I know, they could be making fun of me and the English-speaking students!*

As the 2021-2022 school year progressed, Ale Ortega continued to receive pointed reactions from Barneshaven East teachers expressing their negative views regarding the usefulness of expending the additional time and effort required to engage in multilingual instructional teaming. By the end of the second nine weeks period, Ale realized she would have to *rethink* her original turnaround leadership strategy on how to go about integrating multilingual teaming into educators' instructional planning and teaching practices if she was ever going to be successful in addressing the biliteracy academic learning development and support needs of the large population of emergent bilingual students at Barneshaven East High School.

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

Ale Ortega had hoped that her *multilingual teaming for EB learner success* initiative would gain traction among Barneshaven East teachers and that, as core content area teachers became involved with these ideas during their weekly professional learning community (PLC) planning meetings, teachers would begin to see the payoffs for both their students and themselves of embracing this approach as a means to better serve the second language acquisition and biliteracy content learning development needs of the campus's significant population of emergent bilingual students. However, it became increasingly clear to Ale as she continued to interact with core content teachers in multiple grade levels across the campus and as the mid-point of the 2021-2022 school year approached that getting teachers to genuinely "buy in" to her multilingual teaming ideas and incorporate them into their weekly PLC instructional teaming activities was going to be an uphill battle. By the end of fall 2021, Ale had come to the realization that her initial plan to fully implement her *multilingual teaming for EB learner success* initiative early-on in the 2021-2022 school year was not practical. Her initial expectation going into her new lead instructional coaching role was that teachers would openly embrace her multilingual teaming ideas and would incorporate these ideas wholeheartedly into their weekly grade-level instructional teaming practices. However, Ale's passion for promoting multilingual teaming among secondary teachers to support emergent bilingual students' learning improvement would have to be tempered by the fact that Ale was now receiving more and more direct negative pushback from core content faculty in multiple PLCs across the campus. In mid-December, Ale Ortega was given a particularly jolting reality check during an informal conversation with one veteran teacher, Iselda Echevarria, a native Spanish language support specialist and social studies teacher, who served as the eleventh-grade instructional team leader. Ms. Echevarria explained to Ale in stark terms what Ale was up against: *Ale, I appreciate your turnaround leadership efforts and I understand what you are trying to accomplish. However, you need to understand the realities of high school teaching. You've been teaching at the middle school level for the past fifteen years, and clearly your commitment to serving the learning support needs of emergent bilingual students has paid off. You've been undeniably very successful in enhancing the biliteracy development and learning performance of these middle school students. But addressing the needs of EB students at the middle school level when they're at a developmental age where they are more malleable and responsive to instructional interventions is a very different challenge than trying to provide learning support to sixteen- and seventeen-year-old EB students in high school. Our EB students at Barneshaven East are immigrant students who along with their families have struggled to acclimate themselves to American culture and the US educational system. These high school-age EB students have become much more entrenched in their negative attitudes about learning because they've experienced multiple academic setbacks and failures in the past five to six years due to their inability to make sufficient progress in developing their dual language competencies. Core content teachers at Barneshaven East are challenged enough with trying to provide our native English-speaking students with the instructional support they need to perform well on the state's academic assessments. Teachers simply don't have the additional time or energy to spend overhauling their weekly instructional planning practices to also address the multilingual learning needs of these EB students. In many teachers' minds, these EB students have already given up academically anyway!*

Data Analysis and Literature Review Activities. Determined to probe some of the underlying reasons why teachers were resisting coming on board with and fully supporting the *multilingual teaming for EB learner success* initiative that Ale Ortega had enthusiastically championed as the school's new "turnaround improvement agenda" for the 2021-2022 school year, Ale and her instructional improvement team colleagues decided to conduct a focused **Exploratory Needs Assessment (ENA) investigation** that would be anchored in multiple kinds of student-learning performance data as well as observational and perspectivist data collected surrounding teachers' ongoing PCL-centered teaming activities. Ale and her team began their root-causal analysis investigation by collecting and analyzing a variety of instructional materials and relevant student-learning data, including core content area teachers' instructional unit plans and PLC team meeting agendas and available benchmark data across the four major core content areas (English/language arts, math, science, and social studies) generated from student-learning formative assessments completed over the past two nine-week grading cycles. In addition, as part of an intentional plan to expand their data collection efforts through collecting and analyzing multiple kinds of *observational* and *perspectivist* data that could potentially further inform their root-causal analysis efforts, Ortega and her instructional improvement team also observed teachers' grade-level PLC meetings and interactive planning activities in ninth through twelfth grades over a four-week period and conducted informal interviews during this same timeframe with multiple core content teachers in each grade level to solicit teachers' own perspectives on their pedagogical thinking and instructional planning practices.

After observing PLC meeting activities, interviewing multiple teachers, and discussing results emerging from collective analyses of all data collected, Ale Ortega and her instructional improvement team began to glean new insights into what could be some “key factors” (i.e., underlying *root causes*) that were contributing to and fueling Barneshaven East High School’s persistent surface-level “emergent bilingual learners’ lack of biliteracy academic progress” student-learning problem. These insights centered around teachers’ own attitudes regarding the perceived learning capabilities of emergent bilingual students and teachers’ limited PLC team-centered instructional planning and classroom teaching practices. The *first insight* Ortega and her team came upon was that many teachers at Barneshaven East High School harbored negative attitudes toward emergent bilingual (EB) students and their learning potential and, as a result, had developed a “fixed pedagogical mindset” that EB students were not capable of succeeding academically at the level required in secondary core content classes. Many of the teachers that Ale and her team interviewed, in fact, expressed their belief that the EB students in their classrooms were simply lazy and unmotivated. These teachers were convinced that these EB students were innately academically low performing not because of any failures on the part of the teachers to provide appropriate instructional support but because these students had inherently low academic motivation that was the result of these students’ cultural and economic backgrounds. These teachers had, in fact, developed the entrenched pedagogical mindset that emergent bilingualism *itself* was a “negative defining characteristic” of these EB students. For these teachers, the fact that these immigrant students’ native language was Spanish and not English and that these students had been enrolled in various English as a Second Language (ESL) programs in American elementary and middle school schools for several years and were now in American high school educational programs and were still demonstrating minimal multi-lingual learning growth was itself the underlying reason why these students continued to demonstrate low academic performance in their secondary classrooms. Thus, many Barneshaven East teachers, as a result, had internalized a “*deficit thinking* mindset” that included a set of lowered learning performance expectations for these emergent bilingual students because of their cultural background and insufficiently developed English language proficiency skills. These teachers viewed these students in a negative light as “limited English proficient” and therefore possessing inherently low educability rather than viewing these students’ emergent bilingualism as a cultural and linguistic “positive advantage” in a twenty-first-century multilingual, multicultural world. The *second insight* Ortega and her team generated (an “operational planning practice” insight extending from the first insight) was their data-informed realization that Barneshaven East teachers, as part of their regular instructional planning activities, were not actually providing emergent bilingual students with authentic *scaffolded learning opportunities* that could meaningfully support these EB students’ systematic, gradual dual-language academic development. That is, Barneshaven teachers were not planning authentic “interactive learning activities” that are carefully designed and structured to help EB students make the kinds of important incremental *mental multilingual connections* they need to make to be able to progress in their dual language literacy development skills to the point where they can fully comprehend and internalize key academic concepts in core content classes in both their native language and in their second language and begin to demonstrate genuine *biliteracy* proficiency.

Ale Ortega and her team then reviewed relevant literatures to identify literature-based strategies that could inform the design of a targeted professional development (PD) intervention program to address Barneshaven East teachers’ professional practice improvement needs. Within the psychology literature on “fixed” versus “growth” mindsets (Dweck, 2016), Ale and her colleagues explored practical strategies that school change-agent leaders can employ to assist educators in self-reflecting on their own pedagogical and instructional thinking to identify possible elements of their overall thinking that could be inhibiting their ongoing positive professional development. In the instructional improvement literature, Ale and her team found insights regarding factors that can constrain teachers’ instructional practices along with practical techniques and action steps that multiple school improvement researchers have developed that have proven effective in assisting groups of educators engage together in “deep data digs” into student learning assessment data along with methods for helping teachers critically examine their own grade-level instructional team planning habits as means to investigate the underlying root causes of students’ learning deficiencies (Bernhardt, 2013; Blanc et al., 2010; Boudett et al., 2010; Bouwmans et al., 2017; Bowers et al., 2014; Kennedy & Jones, 2015; Lachat & Smith, 2005; Love et al., 2008; Love, 2009; Mandinach, 2012; Mandinach & Honey, 2008; Mandinach & Jackson, 2012; Supovitz & Klein, 2003; Venables, 2011, 2014; White, 2011). Finally, within the recent literature on instructional coaching, Ale and her team reviewed methods instructional improvement leaders can adapt and apply in their own school organizational contexts to nurture buy-in among teachers into investing in their own reflective professional learning and instructional renewal.

These methods include encouraging teachers to engage together in peer observations of each other's classroom teaching along with follow-up conversations about perceived teaching strengths and weaknesses that can form the basis for cultivating teacher-led peer coaching and collegial mentoring-centered *professional learning cultures* on individual campuses as well as across entire school districts (Dufour & Fullan, 2013; Dufour et al., 2004; Dufour et al., 2016; Ende, 2016; Krečič & Grmek, 2008; Lieberman et al., 2014; Marzano et al., 2016; Murphy, 2016; Stringer, 2013).

Problem Reframing. The insights emerging from the team's collective data analyses and literature review activities caused Ale and her colleagues to reframe their thinking regarding what were some of the underlying *root causes* fueling Barneshaven East High School's emergent bilingual student-learning problem. It now became clear to Ale Ortega and her investigative team that the underlying root causes of the EB student-learning problem at Barneshaven East were not actually factors associated with the EB students but rather involved *the entrenched pedagogical attitudes and beliefs* of the teachers themselves and their current limited instructional planning and teaching practices. In short, core content teachers at Barneshaven East were: 1) mired in their own entrenched *deficit thinking* regarding the learning potential of the emergent bilingual students in their classrooms; and 2) were impeded by low levels of *professional self-efficacy* regarding their sense of competence in being able to engage together in authentic, data-informed multilingual instructional teaming to support the biliteracy academic development of EB learners. The identification of teachers' own deficit thinking and low self-efficacy regarding their multilingual instructional planning capabilities as the underlying root causes fueling emergent bilingual students' academic learning deficiencies enabled Ale Ortega and her team to reconceptualize the real problem they needed to address. Rather than attempting to address Barneshaven East High School's instructional improvement challenge merely from the surface-analytic level of an "EB students' lack of biliteracy academic learning progress" problem, Ale and her team now realized that in order to properly address the surface-level "student-learning" problem, they would have to intentionally target the underlying *root causes* of the student-learning issue, which they now came to understand were problems associated with teachers' own professional practices. Thus, to guide their intervention efforts moving forward, Ale and her team formulated the following new root-causal data analysis-supported **reframed (low inference) Problem of Professional Practice rationale statement** for Barneshaven East educators: *Core content teachers at Barneshaven East over time have developed a fixed pedagogical mindset and entrenched deficit thinking attitudes regarding EB students' learning potential. Because of this, there is an urgent need to reduce core content teachers' negative bias towards bilingualism and increase these teachers' sense of competency in being able to collaborate with Spanish heritage language teachers to engage together in 'disaggregated data analysis-informed' multilingual instructional teaming to design and deliver instructional units (in both English and Spanish) that can effectively address EB students' biliteracy academic development.* Following from this reframed Problem of Professional Practice statement, Ale and her team then formulated the following **refined Theory of Action (If/Then) operational statement**: *IF instructional coaches 1) work intentionally to help core content teachers more fully comprehend the unique cultural and linguistic biliteracy development needs of emergent bilingual high school students who are experiencing stagnant academic learning growth; 2) provide these teachers with practical instructional planning and teaching strategies to help teachers address their EB students' low academic self-esteem and deflated learning motivation levels; 3) immerse teams of core content area teachers and Spanish heritage language teachers directly in engaging together in deep data dives to systematically analyze students' disaggregated formative assessment data to explore some of the underlying 'cultural and linguistic root causes' of EB students' academic learning deficiencies; and 4) model to teachers how to fully internalize and integrate these data-informed, root-causal understandings and strategies directly into their dual-language instructional team planning, THEN core content teachers and Spanish heritage language teachers will be able to collaborate together to design and deliver effective 'dual-language instruction' to emergent bilingual students that will ensure EB students' improved academic performance on state student-learning accountability tests.*

Notably, one critical insight that emerged from Ale and her team's collective problem reframing efforts was the realization—based on the team's analyses of the content and quality of existing grade-level instructional units, observations of teachers' PLC teaming practices and instructional planning habits, and perspectives gleaned during informal interviews with core content area teachers across multiple grade levels—that Barneshaven East High School's core content area teachers and Spanish heritage language teachers are not engaging intentionally in any kind of *systematic, collaborative 'deep data analysis-informed' instructional design teaming* as part of their weekly instructional planning practices.

In short, Barneshaven East grade-level core content and Spanish heritage language teachers' grade-level teaming practices could be characterized by what Rick Dufour and Doug Reeves describe as "PLC lite" instructional planning (Dufour and Reeves, 2016). In their weekly individual grade-level "PLC lite" team meetings, core content teachers and Spanish heritage language teachers evidently are separately "going through the motions" of instructional teaming in a surface-level way without really conducting focused analytic deep dives—as a combined *multilingual, cross-curricular team*—into students' performance data in a manner that could result in teachers together gaining any new insights into some of the underlying root causes of emergent bilingual (EB) students' learning problems. In addition, core content teachers' "PLC lite" instructional teaming habits were also preventing these teachers, in particular, from seeing how their bilingualism biases and their own negative attitudes regarding EB students' learning potentials were helping to further ingrain and perpetuate their fixed pedagogical mindsets regarding what these teachers perceived to be the "limited usefulness" of multilingual teaming as a viable strategy for addressing EB students' learning support needs. This key insight regarding the overall superficial "PLC lite" nature of core content teachers' and Spanish heritage language teachers' existing instructional teaming practices served as the catalyst for Ale and her instructional improvement team_colleagues to refocus their turnaround instructional improvement efforts in a new direction. Ale and her team now realized that they would need to redirect their instructional coaching support efforts in two main areas. First, Ale and her team would need to design carefully structured *immersive learning experiences* (orchestrated by the campus's instructional coaches) to help the campus's core content teachers and Spanish heritage language teachers learn how to engage together as a combined *multilingual, cross-curricular team* in deep data dives into students' assessment data to investigate fully the underlying "cultural and linguistic root causes" of EB students' academic learning deficiencies and stagnant learning growth. Second, Ale and her team would then need to intentionally model for these teachers how to engage together in *data-informed collaborative conversations* about the results of their disaggregated data analyses as an intentional means to inform and guide their team-centered instructional planning efforts to design and implement targeted, fully data analysis-informed "multi-language, high-engagement learning opportunities" for EB students.

Based on the above analytic logic along with creative instructional planning strategies and best practices gleaned from their review of relevant literatures, Ale Ortega and her instructional improvement team colleagues were able to construct the following **Barneshaven East High School Change Drivers Diagram** (see Figure 1) to guide their subsequent professional learning intervention program design planning.

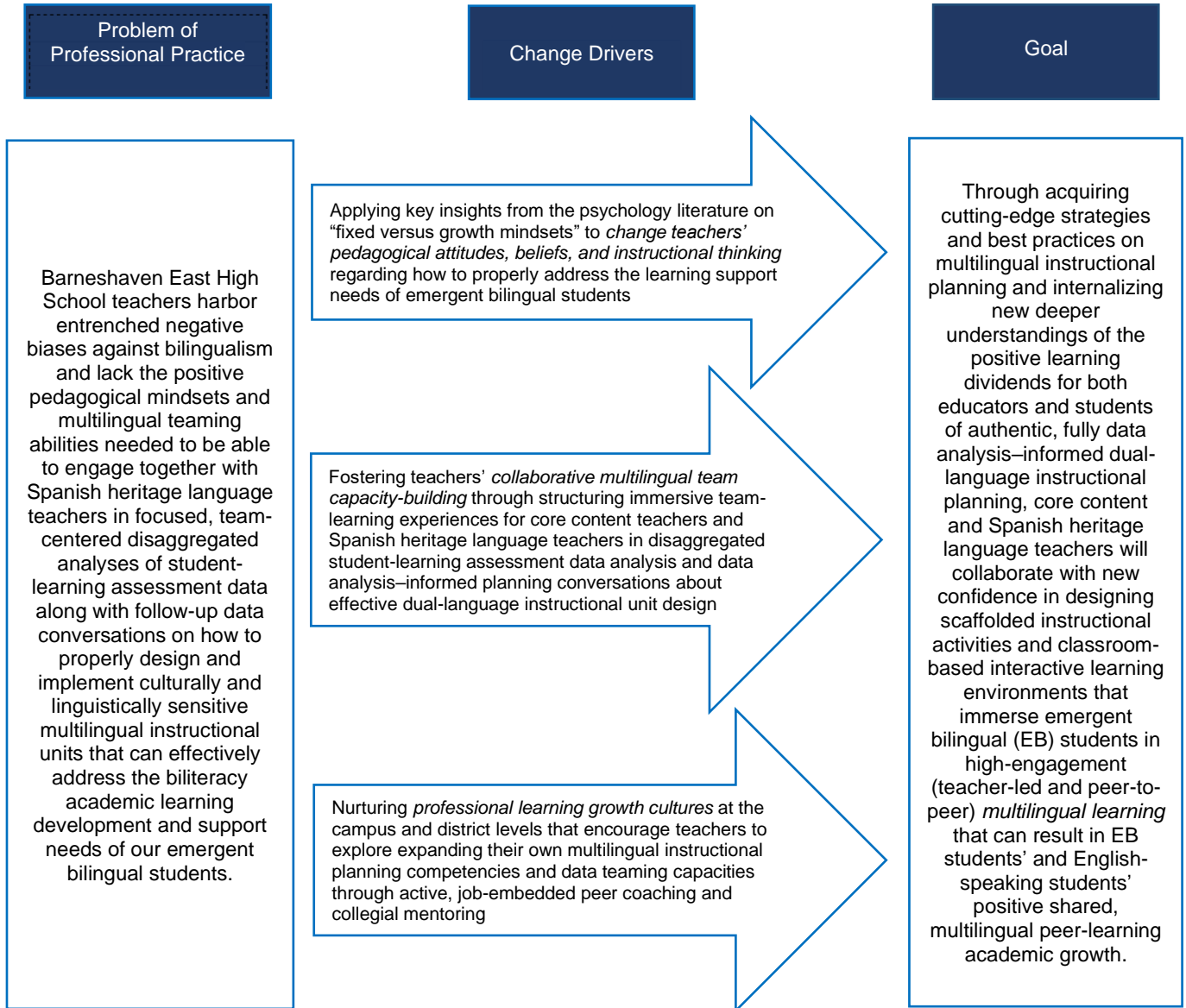


Figure 1 Barneshaven East High School Change Drivers Diagram

Intervention Design Development

Using the above design-based school improvement analytic logic to propel their instructional improvement intervention thinking, Ale Ortega and her team were able to identify three specific *change drivers* to guide their campus-based instructional improvement efforts. These change drivers emerged logically from the two data-informed “key factors” (i.e., teachers’ *deficit thinking* attitudes regarding emergent bilingual students’ learning capabilities and teachers’ inability to provide emergent bilingual students with authentic *scaffolded learning opportunities* that can meaningfully support EB students’ systematic, gradual dual-language academic development) that Ale and her team had identified that were found to be acting as underlying root causes of Barneshaven teachers’ professional practice problem.

The *first change driver* addresses teachers' entrenched pedagogical attitudes, beliefs, and deficit instructional thinking regarding the perceived learning capabilities of the emergent bilingual students in their classrooms. The intent of the professional development (PD) modules associated with this change driver is for PD facilitators to focus on helping teachers engage in conscious *critical self-reflection* regarding their own professional attitudes and beliefs about the perceived learning potentials of emergent bilingual students and, through doing so, discard their habitual "judgmental" thinking and move toward adopting a "collaborative multilingual learning" instructional planning approach to providing for the positive learning support needs of immigrant EB students.

The *second change driver* focuses on providing both core content and Spanish heritage language teachers with intensive professional learning experiences in *authentic data teaming*. This involves immersing teachers directly in the two critical dimensions of "data teaming", namely: 1) teachers conducting iterative deep data dives into their students' disaggregated learning performance assessment data to investigate and identify the root causes of students' learning deficiencies; and 2) teachers then engaging together in ongoing *collaborative data conversations* to discuss the results of their collective disaggregated data analyses as a means to generate new insights about students' learning problems that can then guide teachers' fully data-informed, intervention design-based multilingual instructional planning. Importantly, these data conversations will enable teachers to explore practical ways to effectively integrate scaffolded learning opportunities into their overall multilingual instructional planning efforts to support emergent bilingual students positive, incremental dual-language academic development.

Finally, the *third change driver* emphasizes the need for change agent leaders to work proactively to nurture forward-looking *professional learning growth cultures* at both the individual campus and district levels that encourage teachers to take ownership in their own continuous professional learning. This kind of "active learning" growth culture is one in which teachers are encouraged to model and share literature-supported instructional design strategies and classroom teaching best practices with each other through engaging collaboratively in carefully structured, job-embedded *peer observation/coaching and collegial mentoring activities* that center on effectively addressing the context-specific, data-informed multilingual academic learning support needs of emergent bilingual students.

Employing their Change Drivers Diagram as a "strategic roadmap" to guide their instructional improvement operational thinking, Ale Ortega and her improvement team colleagues were then able to move forward to develop their focused **Instructional Improvement Intervention Program "Implementation Plan"** for the Barneshaven East High School campus (see Table 1). The Barneshaven East High School's Intervention Program Implementation Plan consisted of multiple sets of professional development (PD) modules designed to involve participating teachers in multiple content knowledge acquisition and interactive applied learning activities to structure and guide their professional learning.

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

WEEK	FORMAT	CONTENT / ACTIVITY
1	Meetings of all selected participants	<p>Introducing key concepts:</p> <ul style="list-style-type: none"> • Understanding bilingualism • Understanding academic biliteracy: Deciphering the cultural and linguistic <i>academic biliteracy development</i> learning support needs of emergent bilingual (EB) students • Developing EB students’ native language literacy within an academic biliteracy development program as key to ensuring EB students’ second language acquisition success • Unmasking deficit thinking: Recognizing unintended educator biases regarding emergent bilingual students’ “academic biliteracy” learning capabilities • How can core content teachers and Spanish heritage language teachers collaborate in meaningful ways as intentional <i>multilingual, cross-curricular instructional planning teams</i> to design and implement creative instructional units and assessments to support EB students’ successful “academic biliteracy” learning? • What are the advantages of multilingual, cross-curricular instructional teaming for enhancing emergent bilingual and English-speaking students’ classroom-based, interactive peer learning? • What are the advantages of multilingual, cross-curricular teaming for enhancing teachers’ continuous professional learning? • Engaging in multilingual, cross-curricular teaming to promote a genuine “professional growth” mindset among educators in a high diversity urban high school • How can multilingual, cross-curricular instructional teaming be integrated effectively into the overall professional learning culture of a high school campus?
2	Meetings of all selected participants	<p>Sessions on <i>authentic data teaming</i> practices:</p> <ul style="list-style-type: none"> • Understanding the difference between “PLC lite” and authentic data teaming • Engaging together as a <i>multilingual, cross-curricular instructional team</i> in disaggregated data analysis to investigate and identify the underlying root causes of EB students’ learning deficiencies • Utilizing root-causal data analysis to pinpoint inhibiting factors impeding emergent bilingual students’ academic biliteracy development • Leveraging the results of disaggregated root-causal data analyses to inform <i>collaborative data conversations</i> to guide multilingual, cross-curricular instructional planning efforts • Teachers will participate in an <i>immersive team-learning project</i> (with direct modeling and support feedback provided by instructional coach facilitators) on how to utilize disaggregated data analysis and collaborative data conversations to plan and implement a “multilingual, cross-curricular instructional unit” in their classrooms
3 through 5	Classroom observation/peer coaching and collegial mentoring cycles	<p>Teachers conduct multiple classroom observations of fellow teachers focused on multilingual, cross-curricular instructional strategies that promote emergent bilingual (native Spanish-speaking) and native English-speaking students’ interactive peer learning</p> <ul style="list-style-type: none"> • Core content and Spanish heritage language 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 activities that engage students in biliteracy deeper learning.
3 through 5	Individual interview meetings with co-partner teacher teams	<p>Informal interviews with co-partner teams of core content and Spanish heritage language teachers to encourage teachers to share their perspectives and insights gleaned from their involvement in the multi-week observation/coaching and collegial mentoring cycles</p>

Ale Ortega and her Barneshaven East High School instructional coaching staff served as session facilitators for each of the weekly series of meetings and activity sessions included in the professional development (PD) intervention program (see Table 1). A total of sixteen core content area teachers (four teachers each from the ninth through twelfth grades representing the four major content areas: English/language arts, mathematics, science, and social studies) were selected to participate in the intervention program. In addition, eight Spanish heritage language teachers (two teachers each from the ninth through twelfth grades) were also selected to participate. The first week of PD intervention program implementation focused on providing teacher participants with relevant knowledge and insights regarding key concepts associated with serving the learning support needs of emergent bilingual students, including: understanding bilingualism and academic biliteracy development; developing emergent bilingual students’ native language literacy within an academic biliteracy development program; unmasking and acknowledging deficit thinking attitudes that can inhibit teachers’ unbiased, equitable instructional planning and classroom teaching practices; and strategies on how core content teachers and Spanish heritage language teachers can collaborate in meaningful ways as intentional *multilingual, cross-curricular instructional planning teams* to design and implement creative instructional units and assessments to support EB students’ successful “academic biliteracy” learning. The second week of the PD intervention program focused on providing teacher participants with in-depth knowledge and skills on how to engage in authentic data teaming, including assisting teachers in learning how to engage together as multilingual, cross-curricular instructional teams in: 1) disaggregated data analyses to investigate and identify the underlying root causes of emergent bilingual students’ biliteracy learning deficiencies; coupled with 2) involvement in follow-up collaborative data conversations to leverage the results of data analyses to guide teachers’ multilingual, cross-curricular instructional planning efforts.

During weeks three through five of the intervention program, teachers participated in carefully designed *applied learning activities* consisting of iterative sets of intensive peer observation/coaching and collegial mentoring cycles. These applied learning activities were designed to enable small subgroups of teachers to work together in “mini-teams” to explore working together to adapt, customize, and apply the knowledge and skills they obtained during the first two weeks of the intervention program to their own team-centered instructional planning and classroom teaching practices. Through engaging together in multiple cycles of instructional design planning and classroom teaching observations coupled with one-on-one peer coaching and collegial team-mentoring sessions, teachers were afforded opportunities to explore together how they could utilize multilingual, cross-curricular teaming processes to their advantage to enhance the ways in which they can support the biliteracy academic learning development needs of all students in their classrooms (both emergent bilingual and native English-speaking students).

A *three-phase research design* (see Figure 2) was used by Ale Ortega and her team to guide their efforts in developing and implementing the targeted professional development (PD) instructional improvement intervention program along with collecting and analyzing relevant process and impact data associated with their overall design-based school improvement work.

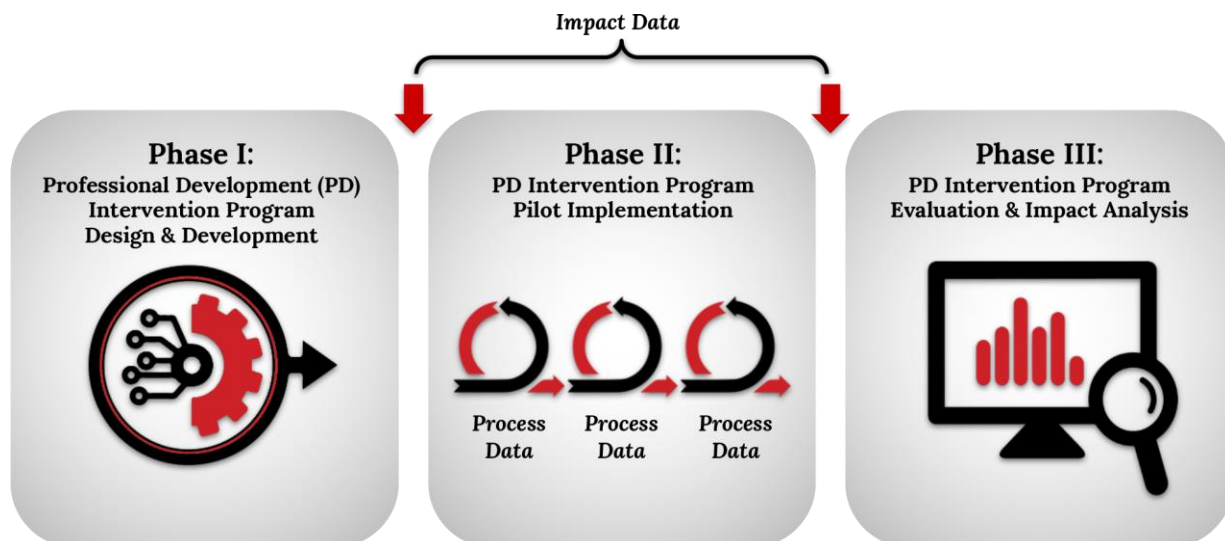


Figure 2 Design-Based School Improvement Three-Phase Research Design

Process data collected by the team consisted of: 1) intervention team members' ongoing observations of teachers as they participated in the various PD modules; 2) teachers' written comments on exit tickets they filled out following their completion of each PD module; and 3) perspectivist data collected during multiple informal individual and focus-group interviews with teacher participants across the entire five-week intervention program. *Impact data* consisted of data obtained through pre- and post-surveys completed by all teacher participants just before and immediately following the intervention program. The team's analysis of the various process and impact data generated during the intervention program's pilot implementation proved instrumental in providing Ale and her team with new, data analysis-informed insights to help them track *changes* in teachers' pedagogical mindsets and instructional teaming behaviors over time as teachers participated together in the various PD session modules and applied learning activities. These data-informed insights regarding observed changes in teachers' thinking and teaming behaviors led to the generation of specific *results* and *findings* emerging from the intervention team's collective instructional improvement case study work. These results and findings are presented below.

Design-Based Instructional Improvement Results and Findings

Ale Ortega and her instructional improvement team colleagues collected multiple kinds of process and impact data throughout the five weeks of the PD intervention program's pilot implementation to gauge the overall effectiveness of the collective "knowledge and skills development" sessions (weeks one and two) and follow-up "applied learning" activities (weeks three through five) in changing participating teachers' pedagogical mindsets and instructional practices regarding how to optimally engage together in effective data teaming to address the academic support needs of emergent bilingual students. The *process data* included: 1) participating teachers' comments on exit tickets following their completion of individual PD sessions; along with 2) perspectives obtained from teachers during iterative sets of ongoing, informal individual and group interviews conducted throughout the five-week intervention program to gauge changes in teachers' thinking during the course of the intervention program. *Impact data* consisted of participating teachers' responses to pre- and post-intervention evaluative Qualtrics surveys administered to all teachers before the start and at the conclusion of the intervention program along with teachers' perspectives solicited during informal "mini-team" interviews conducted at various points as teachers' progressed through the multiple peer observation/coaching and collegial mentoring cycles during weeks three through five of the intervention to ascertain the "incremental impact" of the applied activities on teachers' thinking. Results of analyses of the collective process and impact data provided some positive evidence that the PD intervention program designed and implemented by Ale Ortega and her instructional improvement team was effective in addressing Barneshaven East High School's identified root-causal Problem of Professional Practice (i.e., *Core content teachers at Barneshaven East over time have developed a fixed pedagogical mindset and entrenched deficit thinking attitudes regarding EB students' learning potential. Because of this, there is an urgent need to reduce core content teachers' negative bias towards bilingualism and increase these teachers' sense of competency in being able to collaborate with Spanish heritage language teachers to engage together in 'disaggregated data analysis-informed' multilingual instructional teaming to design and deliver instructional units (in both English and Spanish) that can effectively address EB students' biliteracy academic development.*).

Through systematically analyzing the various process and impact data collected during the implementation of Barneshaven East High School's Instructional Improvement Intervention Program, Ale Ortega and her team were able to identify some discernible **Design-Based School Improvement Results and Findings** associated with this urban school district case study. The following **design research results** were identified that documented observable professional learning benefits that teachers experienced through their participation in the five-week professional learning intervention program. A **first result** that emerged from the Barneshaven East High School Instructional Improvement Intervention Program's implementation was that the program's PD sessions motivated participating teachers to engage in new, deeper levels of individual and group ***critical reflection on their own current instructional planning and classroom teaching practices***. As the intervention program progressed, it became evident to all educators involved (both intervention program designers and participating teachers) that core content area and Spanish heritage language teachers' exposure during the PD knowledge and skills development sessions to key foundational ideas and principles undergirding the concepts of "bilingualism" and "biliteracy academic development" found in the extant literature on emergent bilingual learners—and teachers' interactive discussion of these ideas during the sessions—served as a catalyst to motivate these teachers to *critically reflect on their own current instructional planning efforts and how these efforts were impacting their diverse students' (both emergent bilingual and native English-speaking students') classroom learning*.

Specifically, during the PD sessions, when presented with literature-informed insights on how emergent bilingual learners optimally go about navigating the complexities of developing academic biliteracy [namely: by *first* internalizing key academic concepts and skills in their native language and then *secondly* (with appropriate multilingual, cross-curricular instructional support) learning how to transfer those academic concepts and skills that have been firmly anchored in their minds in their native language to their second acquisition language], these teachers became challenged to: 1) confront their own individual and collective entrenched pedagogical beliefs and attitudes about the learning capabilities of emergent bilingual students; and, importantly 2) come to grips with the realization these core content teachers' own narrow-visioned "fixed pedagogical mindsets" regarding the perceived learning capabilities of the emergent bilingual students in their classrooms had become a significant inhibiting factor that was adversely (and unnecessarily) impacting their effectiveness as instructional unit planners. A **second result** that emerged from core content and Spanish heritage language teachers' participation in the five-week professional development sessions was the observation by PD session designers (supported by analyses of intervention process and impact data) that teachers' active participation in *authentic data teaming immersive learning activities* during the PD sessions—that is, teachers' active involvement in intensive teaming efforts that included engaging together in "deep data dives" into students' disaggregated learning performance assessment data to investigate and identify the underlying root causes of students' learning deficiencies in conjunction with follow-up "collaborative data conversations" to leverage data analysis results to guide their subsequent instructional unit planning—**caused teachers to gain a more informed, sensitive understanding of the unique learning challenges of emergent bilingual students**. As a result, these teachers become more open to the potential of "multilingual teaming" as a viable way to restructure their instructional teaming and classroom teaching practices. Core content and Spanish heritage language teachers' collaborative engagement through working together as organized "cross-curricular mini-teams" within the intervention program's data teaming "immersive learning activities" (and iteratively discussing with each other their new learning experiences during multiple interactive "team deliberation debriefs" as the immersive learning sessions progressed) broadened their perspectives regarding the potential dividends that could accrue to both themselves and their students from fully embracing "multilingual, cross-curricular teaming" as a new, more pedagogically robust way to structure their instructional planning and classroom teaching efforts. These immersive learning "aha moments" served as a springboard to motivate participating teachers to critically self-reflect on their current instructional practices and begin to *change their way of thinking about instructional planning*. In short, teachers' collective "immersive team learning experiences" within the authentic data teaming sessions impacted teachers in ways that caused a noticeable shift in teachers' thinking. Teachers began to reevaluate their previous entrenched attitudes and move from a "fixed pedagogical mindset" toward a more open "professional growth-oriented mindset" that enabled them to more fully internalize and appreciate the value of embracing *multilingual, cross-curricular teaming* as a way to restructure their instructional planning and classroom teaching practices that could demonstrably benefit both their emergent bilingual and native English-speaking students.

The above case study results led to some noteworthy professional learning outcomes (i.e., **design research findings**) emanating from the design-based instructional improvement intervention program implemented in this high diversity urban high school. The **first finding** culled from the case study's results was that instructional improvement team members' and participating teachers' collective experiences within the Barneshaven East High School Instructional Improvement Intervention Program design and implementation effort served to affirm the *transformative power of immersive professional learning*. This finding provided practical validity support for the advantages of direct immersion in "hands-on team learning experiences" as a powerful PD design strategy that can incentivize teachers to critically reflect on their own current (sometimes entrenched) pedagogical attitudes and instructional practices through structured exposure to new literature-based knowledge and direct immersion in team-centered applied learning in intensive ways that can lead to positive changes in teachers' overall teaming practices. The **second finding** emanating from the case study's results was that change-agent leaders working in secondary campuses in high diversity school districts can utilize cutting-edge *design-based school improvement investigative techniques* found in the education design research literature to engage together in focused root-causal analyses of teachers' professional attitudes and behaviors to uncover underlying problems associated with teachers' own instructional planning and classroom teaching practices. The identification of these "problems of professional practice" can then lead to the design and implementation of targeted professional development (PD) intervention programs that can broaden teachers' *data-informed team learning* and transform an entire school's *teaching and learning culture* to benefit the academic literacy development of all learners.

The collective results and findings emanating from the Barneshaven East High School design-based intervention case study was viewed by district administrators as initial, positive evidence supporting the effectiveness of the *design-based approach* for developing and implementing data analysis–informed professional development interventions that can change teachers’ overall instructional teaming practices in meaningful ways to effectively address the learning support needs of emergent bilingual students. District leaders plan to utilize the results and findings derived from the pilot implementation of the Barneshaven East High School Instructional Improvement Intervention Program to turnkey this kind of targeted design-based intervention PD programming in upcoming years in other high schools in the district.

Discussion

This section provides a literature-informed discussion of key “turnaround instructional leadership” insights and understandings that emerged from the Barneshaven East High School Case Study profiled above. The discussion below is organized into three sections focused on instructional leadership challenges and opportunities associated with: 1) addressing the unique academic development needs of emergent bilingual learners in high diversity school districts; 2) developing secondary teachers’ multilingual, cross-curricular instructional planning capacities through direct immersion in authentic data teaming; and 3) nurturing school-wide distributed leadership cultures of academic success for emergent bilingual learners in secondary campuses anchored in dual language instructional planning and professional learning community–embedded coaching teams. A set of *design principles* derived from the case study’s collective results and findings is also presented. These design principles may be of practical use to change-agent leaders working in high diversity urban school districts who are interested in exploring how to integrate educational design research methods in conjunction with multilingual, cross-curricular instructional teaming strategies into their ongoing student-learning improvement intervention efforts to: 1) refocus and energize the multilingual, cross-curricular data teaming capacities of core content and heritage language teachers; and 2) fully support the biliteracy academic development needs of emergent bilingual learners.

Addressing the Unique Biliteracy Academic Development Needs of Emergent Bilingual Learners in High Diversity School Districts

Addressing the affective, linguistic, and cognitive development and support needs of emergent bilingual students is a critical instructional challenge confronting K-12 school district leaders in the United States. This challenge is most acute in states such as Texas, California, and New York that continually experience the largest annual percentage increases in new non-citizen immigrant families each year. Immigrant diversity in Texas, in particular, has increased steadily over the past ten years due to large influxes of immigrant families from Mexico as well as from other Latin American countries (notably: El Salvador and Honduras). In addition, the overall heterogeneity of Texas immigrants has continued to expand as Texas in recent years has continued to attract more immigrants from a wider range of countries than in the past, including sizeable annual increases in percentages of immigrants from India and China. These recent immigration trends suggest that Texas in the years ahead will continue to experience not only sustained population growth from immigration but also an increasingly diverse immigrant population, mirroring the immigrant population growth patterns in other large immigrant-dense states, such as California and New York. Given its large and continually growing foreign-born population, over one quarter of all current residents aged 5 or above in Texas speak a language other than English (most typically Spanish) at home, either exclusively or along with some English. This is certainly the norm for Spanish-speaking immigrant families coming to Texas from Latin American countries, such as Mexico, El Salvador, and Honduras (source: Center for Immigration Studies Report: *Shaping Texas: The Effects of Immigration, 1970-2020*. Retrieved at: <https://cis.org/Report/Shaping-Texas-Effects-Immigration-19702020>). These demographic patterns indicate that addressing the biliteracy academic development and instructional support needs of emergent bilingual learners in Texas elementary and secondary schools will continue to be a high-priority instructional leadership challenge facing Texas school district leaders into the foreseeable future.

The most revealing indicators of the persistent academic learning gaps and essentially “frozen” English language acquisition of high school–age emergent bilingual (EB) students in Texas continue to be EB students’ academic performance scores on State of Texas Assessments of Academic Readiness (STAAR) End of Course (EOC) exams and their linguistic proficiency levels as measured by the Texas English Language Proficiency Assessment System (TELPAS).

Emergent bilingual students in Texas, including the high school–age EB students profiled in this article’s Barneshaven East High School Case Study, continually register significantly lower scores than other demographic groups on high school English/Language Arts (ELA) State of Texas Assessments of Academic Readiness (STAAR) End of Course (EOC) exams. What is especially alarming is that these EB high school students have been in US schools for six years or more. The majority of these same long-term EB students have also failed to show expected linguistic proficiency growth on the Texas English Language Proficiency Assessment System (TELPAS). [Note: The TELPAS is an assessment program for students in Texas public schools who are learning the English language. The TELPAS assessment is administered annually to students who have been identified as English learners (ELs). The TELPAS system assesses English language proficiency in four language domains: listening, speaking, reading, and writing.]

As reflected in the Barneshaven East High School Case Study, some core content area teachers in secondary schools in Texas may hold somewhat negative attitudes regarding the learning capabilities of emergent bilingual students, perceiving these students’ academic low performance as a logical result of their innate laziness and lack of motivation. Moreover, many of these same core content teachers may also harbor an engrained negative bias against the idea of *bilingualism* itself. For teachers with these attitudes and biases, the fact that emergent bilingual students come to their high school classrooms with Spanish as their native language rather than English is a “negative defining characteristic” of these EB students that, in the view of these core content area teachers, directly inhibits these students’ ability to attain mastery of academic content within the four main core content areas (English/language arts, math, science, and social studies) tested in English in Texas public schools.

To address teachers’ deficit thinking regarding bilingualism and the learning capabilities of emergent bilingual students, instructional leaders in school districts and on individual campuses must work intentionally to: 1) change teachers’ pedagogical mindsets regarding the academic development potentials of emergent bilingual learners; and 2) refocus teachers’ perspectives on how teachers in the core content areas (English/language arts, math, science, and social studies) can collaborate with Spanish heritage language teachers to engage together in team-centered multilingual, cross-curricular instructional planning practices that can effectively address the unique *biliteracy* academic learning support needs of EB students. Instructional leaders can begin to accomplish this by providing targeted in-service professional development to elementary and secondary teachers on key concepts associated with biliteracy. One of the most fundamental concepts informing an accurate understanding of biliteracy academic development is the concept of *linguistic interdependence* (Cummins, 1979, 1981, 2000). Although it might seem counterintuitive to claim that supporting EB students’ ongoing academic literacy development in their own native language can help these students attain higher levels of academic development in their second acquisition language, this, in fact, is precisely how EB learners optimally develop their *academic biliteracy* mental processing skills. Core content area teachers can apply the concept of linguistic interdependence in their own instructional planning and classroom teaching practices through actively supporting emergent bilingual learners in using their native “heritage” language (e.g., Spanish) as a cultural and linguistic *anchor* to first process and internalize key academic concepts in the core content areas in their heritage language and, after doing this, then assisting these students in *transferring* the newly internalized knowledge in their heritage language to their second language (e.g., English) through becoming familiar with academic vocabulary and semantic language structures commonly used in the second acquisition language (e.g., English). Through proceeding instructionally in this manner, emergent bilingual students can be supported in developing sets of *common underlying proficiencies* (Cummins, 1979, 1981) in academic literacy in their native “heritage” language, which then can serve as “culturally and linguistically anchored” knowledge and abilities that these EB learners can leverage and build upon to develop academic biliteracy skills in their second acquisition language.

Instructional supervisory leaders in secondary high school campuses, such as those in the Barneshaven East High School case situation, can leverage the foundational biliteracy development concepts of *linguistic interdependence* and *common underlying proficiencies* as theoretical underpinnings that can persuade teachers to consider reconceptualizing and restructuring their instructional planning and classroom teaching practices in ways that can best meet the biliteracy academic learning support needs of their emergent bilingual students. One very practical way to accomplish this transformation in teachers’ instructional planning and teaching practices is to actively encourage core content teachers (teaching in the four main core content areas of English/language arts, math, science, and social studies) to begin partnering with Spanish heritage language teachers in new ways through forming *multilingual, cross-curricular instructional planning teams*.

Through working together within this kind of multilingual, cross-curricular “teaming structure”, core content area teachers and Spanish heritage language teachers can bring to the instructional planning table their own distinctive pedagogical insights and perspectives on how to best plan to support students’ learning and work together to combine these separate insights and perspectives in ways that can benefit the “biliteracy academic development” of *both* emergent bilingual and native English-speaking students. Indeed, some of the most effective “cross-curricular” instructional units are those in which teachers capitalize on the power of *peer-to-peer interactive learning* to design and implement fully immersive problem-based learning projects and activities within which students are provided with multiple opportunities to learn from each other. These kinds of carefully designed interactive learning projects can provide emergent bilingual students with important instructional opportunities to bolster their biliteracy academic vocabulary and conceptual knowledge through interacting directly with both their EB and English-speaking student peers while, at the same time, also providing native English-speaking students with important opportunities to expand their own multi-cultural and multi-linguistic academic and social understandings. The ultimate outcome of this kind of multilingual, cross-curricular peer-to-peer interactive learning is an enhanced degree of academic and social biliteracy “deeper learning” development for all students (Martinez & McGrath, 2014).

Developing Secondary Teachers’ Multilingual, Cross-Curricular Instructional Planning Capacities through Direct Immersion in Authentic Data Teaming

Instructional improvement change-agent leaders working in high school contexts can utilize “immersive learning” design strategies to implement interactive team-learning opportunities for educators within which instructional personnel can learn together with their colleagues and directly experience the positive professional growth dividends that can be realized through engaging together in intensive data teaming. As described in the above Barneshaven East High School case study, Ale Ortega and her team leveraged the *transformative power of immersive professional learning* as a critical conceptual design pillar informing their **Barneshaven East High School Change Drivers Diagram** and accompanying “fully operationalized” **Instructional Improvement Intervention Program**. The conceptual logic of this design pillar centers on recognizing that the most positive new team-learning dividends that can accrue to educators—new “deeper learning” dividends that educators will enthusiastically embrace and actually want to integrate into their own “best practices” toolkits—always come through designing and implementing professional learning experiences within which teachers are encouraged to take on active “learning-by-doing” roles that enable them to become *directly immersed* in their own team-centered, peer-to-peer learning. Through utilizing this conceptual design insight, Ortega and her team were able to develop and implement fully immersive professional learning experiences for Barneshaven East High School core content and Spanish heritage language teachers within which these teachers could explore together the professional team-learning payoffs that can be realized through participating directly and intensively in *authentic* data teaming. For these Barneshaven East teachers, that involved challenging these teachers to move beyond their usual comfort zones—which leaned mostly toward “PLC lite” teaming practices where teachers routinely “go through the motions” of teaming without really engaging in intensive data teaming efforts (Dufour and Reeves, 2016)—to embracing new kinds of professional “deeper learning” that can only come through working together in authentic, multileveled data teaming (Love, 2009; Martinez & McGrath, 2014).

Since the critical “change-agent leadership” challenge for Ale Ortega and her team involved convincing core content teachers and Spanish heritage language teachers that to be able to positively impact the dual-language academic literacy development of emergent bilingual students they would need to learn how to “think different and work together in new ways” as a *multilingual, cross-curricular team*, Ale and the instructional coaches serving as PD facilitators during the intervention program’s various PD modules worked intensively to create immersive learning experiences within which these teachers could explore their own pedagogical mindset “deficit thinking” and how this entrenched thinking was limiting the overall effectiveness of their instructional planning. This “mindset shift” challenge in a nutshell involved getting teachers to *rethink their overall approach to instructional planning*. At the operational level, this shift in teachers’ thinking involved motivating teachers to engage together in *critical self-reflection* (both individually and as a team) to move from their “fixed mindset” deficit thinking (i.e., core content teachers, in particular, mired in their own entrenched pedagogical attitudes and beliefs regarding the learning potential of emergent bilingual students in their classrooms) to becoming open to exploring the advantages of adopting a more expansive “instructional growth mindset”.

For these core content teachers and Spanish heritage language teachers, adopting a new instructional growth mindset would mean becoming willing to investigate *as a collaborative team* the new teaching and learning insights and dividends that could potentially accrue to both these teachers and their students through experimenting with *authentic “multilingual, cross-curricular” instructional team planning anchored in intensive data teaming*.

Fully realizing that genuine multilingual, cross-curricular data teaming can only be experienced “from the inside out” through direct immersion in the process, Ale and her fellow instructional coaches focused intently throughout the various PD instructional team planning modules and follow-through observation/coaching and collegial mentoring cycles on getting teachers to experience in a hands-on, fully immersive way the two critical dimensions of “data teaming”. Thus, within the critical “team-learning” phase of the intervention program, Ale and the instructional coaches guided Barneshaven East High School core content teachers and Spanish heritage language teachers in the two critical dimensions of *authentic data teaming*. **First**, Ale and the instructional coaches helped teachers learn how to work together to conduct iterative *deep data dives* into their students’ disaggregated learning performance assessment data to investigate and identify the underlying root causes of students’ learning deficiencies. **Second**, Ale and her colleagues then assisted these teachers in learning how to engage together in genuine *collaborative data conversations* to discuss the results of their collective disaggregated data analyses as an intentional means to generate new enlightened insights about students’ learning problems that could then guide teachers’ fully data-informed, multilingual instructional planning. These data conversations, importantly, were the critical “second step” that enabled Barneshaven East High School core content and Spanish heritage language teachers to explore together *as a multilingual, cross-curricular team* some practical ways to effectively integrate scaffolded learning opportunities and related student-led peer learning experiences into these teachers’ overall multilingual instructional planning efforts to support emergent bilingual students’ positive, incremental dual-language academic learning development. Some examples of the kinds of instructional strategies multilingual teacher teams could consider incorporating into their cross-curricular unit designs to create practical scaffolded learning opportunities to support emergent bilingual students’ incremental biliteracy development can include: 1) using *visuals, gestures, and linguistic supports* (such as: graphic organizers, pictures, sketches, manipulatives, realia; sentence frames, starters, and transition words; use of cognates to ensure primary language support while promoting EB learners’ academic biliteracy development; and vocabulary charts and word walls); 2) utilizing *multiple teaching modalities* (such as: compressed video clips, digital media, games, drawings, and interactive performances including skits, roleplays, etc.); and 3) employing *hands-on activities and cooperative learning* (such as: teacher-centered presentations interspersed with small group tasks that could include pairing and peer sharing; intentional groupings of emergent bilingual and English-speaking students to promote peer-to-peer cultural and linguistic biliteracy development; and learning centers, labs, and simulations). As part of the process of integrating these kinds of scaffolded learning instructional strategies into classroom-based cross-curricular units, multilingual teacher teams will want to take into consideration emergent bilingual (EB) students’ native culture and background experiences along with EB students’ existing content knowledge and academic language proficiency levels in both their native heritage language and second acquisition language. The goal of these varied instructional strategies is to help emergent bilingual students learn how to: 1) clarify and internalize academic concepts using a variety of learning modalities; 2) analyze, write, and create academic text in both their heritage language and their second acquisition language; and 3) gain fluency in thinking and communicating as functioning biliterate learners.

Ale Ortega and her fellow instructional coaches employed the intervention design strategy of organizing groups of core content and Spanish heritage language teachers into various “multilingual, cross-curricular mini-teams” (each “mini-team” consisting of teachers from each of the four core content areas grouped together with two Spanish heritage language teachers) within the PD sessions’ immersive learning activities to enable these teacher mini-teams to directly experience for themselves the processes of authentic data teaming in a fully in-depth way (“from the inside out”). This strategy involved positioning the mini-teams of teachers to leverage their own data-teaming immersive learning experiences as an *analytic anchor* that would motivate these teachers to begin examining in more analytic depth some of the underlying root causes of EB students’ learning deficiencies. Through discussing these identified root causes during multiple “data analysis debriefings”, Barneshaven East teachers were then able to arrive at the data-informed realization—working together as *collaborative data teams*—that the biliteracy academic development needs of emergent bilingual students could be better supported through these teachers coming together and making the informed decision to “restructure” their instructional planning and classroom teaching practices to fully embrace the teaching and learning benefits of multilingual, cross-curricular teaming.

Engaging together in data analysis–informed multilingual, cross-curricular teaming efforts would then enable these teachers to design and implement cross-curricular instructional units that can provide students with opportunities to explore core academic concepts and principles and how these concepts and principles can be applied across the major core content areas (English/language arts, mathematics, science, and social studies) to enhance the biliteracy academic development of both emergent bilingual and native English–speaking students. Thus, through participating in the Barneshaven East High School Instructional Improvement Intervention Program’s iterative sets of immersive learning experiences, Barneshaven East core content and Spanish heritage language teachers demonstrated how instructional improvement program designers can leverage the *transformative power of immersive professional learning* to motivate and enable teams of teachers to internalize and fully appreciate the benefits of bilingual, cross-curricular teaming that is anchored squarely in authentic, intensive data-teaming practices and, through doing so, enhance educators’ overall instructional teaming capacities.

Nurturing a School-Wide Distributed Leadership Culture of Academic Success for Emergent Bilingual Learners Anchored in Dual Language Instructional Planning and Professional Learning Community–Embedded Coaching Teams

Many school district leaders must confront the realities of “student learning performance stagnation” that can occur in elementary and secondary campuses within their districts. Stagnant student learning performance problems in K-12 school districts suggest that whatever instructional improvement initiatives and professional growth–oriented teacher appraisal and support systems district leaders may be investing in are not yielding demonstrable student learning improvement results on state accountability measures over time. There could be a number of underlying factors serving as “root causes” that might be fueling these stagnant student learning performance problems. One factor potentially contributing to student learning stagnation problems in school districts could be that the “professional learning cultures” on individual campuses and throughout the district may be in need of some retooling and rejuvenation. Campus- and district-level instructional leaders may not yet be adept at and/or successful in articulating any clear vision regarding the value of *continuous team learning* as a foundational pillar of the professional learning cultures on their campuses and throughout their district. It could be that instructional leaders on individual campuses within a school district may not have fully internalized and embraced the importance of educator involvement in *ongoing peer-to-peer coaching and collegial mentoring* as activities that teachers, instructional coaches, campus-level administrators, etc. should be engaging in together on a regular basis to drive student learning improvement. Peer coaching and collegial mentoring programs, when designed and implemented correctly in school districts, can be excellent ways to build teachers’ *buy-in* to the value of collaborative sharing of best practices involving data-informed instructional planning and how to create robust teaching and learning environments in classrooms that can challenge and motivate students to want to engage fully in interactive learning activities. Another factor potentially contributing to student learning stagnation problems in school districts could be that the level and depth of teachers’ understanding of and involvement in authentic disaggregated data analyses as part of their weekly professional learning community (PLC) team-planning activities to probe the underlying root causes of students’ learning deficiencies are inadequate. Some campus-based instructional leaders may not be properly *modeling* for teachers how to engage together in deep data dives into their students’ disaggregated learning performance assessment data to identify specific deficiency areas for which teachers then need to develop targeted interventions to properly support students’ learning improvement needs.

To counteract this very common “student learning performance stagnation” problem that can occur in many school districts, campus-based instructional leaders (with full support from district-level administrators) can work to nurture within their school communities robust *school-wide distributed leadership cultures* focused on instructional improvement and academic success for all students—including cultures that can support the learning success of emergent bilingual students—as intentional means to enhance the prospects of ensuring positive student-learning performance gains for all students. One proven strategy change-agent leaders can utilize to help nurture a school-wide distributed leadership culture focused on continuous instructional improvement and academic success for all students is to identify natural “teacher leaders” on their campus who have already fully internalized and appreciate the positive payoffs (to both themselves and their students) that can be realized from collaborating with other teachers in *authentic data teaming*—that is, teachers engaging together in analyzing students’ disaggregated learning assessment data in conjunction with follow-up, data analysis–informed instructional unit–planning team conversations.

Instructional leaders can encourage these teacher leaders to take on collaborative leadership roles on their campuses and work to “turnkey” their data-teaming knowledge and skills through nurturing these same positive attitudes and mindsets about data teaming in other teachers within their grade-level instructional teams.

Ale Ortega and her instructional improvement team colleagues recognized the benefits of leveraging “teacher leaders” to help nurture a positive school-wide “instructional improvement–centered” distributed leadership culture on their Barneshaven East High School campus and how these teacher leaders can be highly effective in building the *instructional teaming capacity* of groups of teachers working within grade-level professional learning communities. Ortega and the instructional coaches assisting her in implementing the iterative *classroom observation/peer coaching and collegial mentoring cycles* for participating teachers during weeks three through five of the Barneshaven East High School’s PD Intervention Program certainly capitalized on the positive distributive leadership “instructional team capacity–building power” of identified teacher leaders on her campus. These teacher leaders proved instrumental during these critical three weeks of applied learning in sharing their own data-teaming knowledge and skills—and especially their understandings of the payoffs of *multilingual, cross-curricular teaming* for supporting the biliteracy academic learning of emergent bilingual students—with their teacher team colleagues both through ongoing, informal peer conversations with fellow teachers and via their direct modeling of multilingual, cross-curricular instructional planning and classroom teaching best practices.

Design Principles Derived from the Barneshaven East High School Case Study

The following *design principles* were generated from the collective data analysis and intervention program development and intervention work completed over the duration of the case study. These design principles may be of practical use to urban school leaders interested in exploring innovative intervention solutions to persistent instructional improvement challenges associated with closing student achievement gaps and providing positive multilingual learning environments for diverse learners in their urban school districts.

Make “peer coaching and collegial mentoring” a more explicit component of the overall professional learning cultures within individual campuses and throughout your school district. Turnaround instructional improvement leaders at both the campus and district levels can jumpstart and enhance the overall quality and effectiveness of the “professional sharing and learning” occurring between/among educators in their school organizations through working intentionally to integrate well designed *educator peer observation/coaching and collegial mentoring programs* into the professional learning cultures existing within individual campuses and throughout their districts. These peer observation/coaching and collegial mentoring programs can provide excellent immersive learning opportunities for educators to “learn from each other” as they work together to apply practical knowledge and skills obtained during their staff development training sessions to directly inform their own day-to-day instructional team planning and classroom teaching practices.

Provide educators with intensive training and support on “authentic data teaming” to revitalize and refocus educators’ instructional teaming efforts. Change-agent leaders can realize substantial instructional improvement gains on their campuses through providing their teachers with structured professional development sessions on how to integrate authentic data teaming into their instructional teaming practices. Teachers working together in grade-level and/or department-level multidisciplinary teams can learn how to utilize to full advantage the two dimensions of authentic data teaming—namely: first, working together as a data team to analyze students’ disaggregated learning performance assessment data to investigate and identify the underlying root causes of students’ learning deficiencies; and then secondly, utilizing the results of their team’s data analyses to guide (via collaborative data conversations) their interdisciplinary unit planning—as concerted means to address in data-informed ways the specific learning support needs of their students.

Leverage the “transformative power of immersive professional learning” to change educators’ entrenched pedagogical mindsets and jumpstart their “growth-oriented” professional learning. Immersing groups of teachers in “intensive, team-centered professional learning experiences” (such as: data-teaming activities that include multiple opportunities for teachers to engage together in disaggregated analyses of students’ learning assessment data coupled with focused collaborative conversations on the results of these data analyses; and multiple iterative opportunities for teachers to participate together in “classroom peer observation/coaching cycles” to review and discuss among themselves the quality and impact of their own and their team members’ classroom teaching practices on students’ learning behaviors) can be an excellent way to jumpstart and invigorate teachers’ growth-oriented professional learning.

These kinds of immersive learning experiences can expose teachers to new and up-to-date instructional knowledge and skills found in the teaching/learning and instructional planning literatures that can motivate teachers to engage (both individually and as teacher teams) in *critical reflection* on their own current pedagogical mindsets and instructional practices and, through doing so, work to change what perhaps could be some engrained “fixed professional mindsets” into more fully open “*growth-oriented professional mindsets*” that can revitalize their overall team-centered instructional planning and classroom teaching.

Utilize intensive data teaming as an “analytic anchor” to build teachers’ multilingual, cross-curricular instructional teaming capacities. Instructional leaders challenged with addressing the biliteracy academic development needs of large numbers of emergent bilingual students in their school districts can build core content area and Spanish heritage language teachers’ informed understandings of the positive learning dividends that can be realized for their students by engaging together in authentic “multilingual, cross-curricular instructional teaming” through utilizing intensive data teaming as an *analytic anchor* to build teachers’ enthusiasm for this kind of focused dual-language teaming. Intervention design planners can develop and implement well-crafted professional development (PD) intervention programs that engage teachers in targeted PD sessions to acquire cutting-edge knowledge and skills on the unique “biliteracy academic development and support needs” of emergent bilingual learners coupled with multiple opportunities for teachers to participate together in “hands-on, applied learning experiences” to learn how to *integrate* these new knowledge and skills directly into their team-centered instructional planning efforts and classroom teaching practices. Through participating in these PD activities, core content area and Spanish heritage language teachers over time can become open to investigating *as a collaborative team* the expanded teaching/learning insights and dividends that can accrue to themselves and their students (both emergent bilingual and native English-speaking students) through embracing the potential of authentic “*multilingual, cross-curricular instructional team planning*” anchored in *intensive data teaming* to build and optimize teachers’ overall instructional teaming capacities.

Conclusion

The Barneshaven East High School case study profiled and discussed in this article provides a revealing example of the unique real-world challenges confronting instructional improvement leaders in high diversity urban school districts in Texas and other high-immigration states in the United States who are tasked with accurately identifying and addressing the unique biliteracy academic development support needs of the growing percentages of emergent bilingual learners comprising their districts’ overall student populations. The collective turnaround efforts engaged in by Ale Garcia and her Barneshaven East instructional improvement team colleagues illustrate how change-agent leaders interested in enacting meaningful instructional improvement on their campuses to more effectively support the academic development needs of emergent bilingual students can reinvent themselves as *design-based school improvement intervention teams* to probe their teachers’ professional practice improvement need areas and leverage the power of design-based thinking and professional development intervention programming to change in positive ways teachers’ engrained “ways of working together” and, in so doing, rejuvenate teachers’ overall instructional data-teaming practices.

To incentivize teachers to critically examine their routine teaming practices and consider embracing the enhanced learning dividends that can be realized for both themselves and their emergent bilingual students through learning how to “think different and work together in new ways” as *multilingual, cross-curricular instructional planning teams*, school improvement intervention teams can apply practical methods and procedures articulated in the design-based school improvement literature to develop and implement creative PD intervention programs that can involve educators in highly immersive and interactive “new professional team-learning” experiences. These learning experiences can assist teachers in discovering how to engage together properly in *authentic data teaming* activities to: 1) analyze student assessment data to investigate and identify the underlying root causes of emergent bilingual students’ learning deficiencies; and then 2) discuss the data analysis results in collaborative data conversations that can then guide teachers’ data analysis-informed dual-language, cross-curricular instructional unit planning and associated classroom teaching to more effectively meet the biliteracy learning development and support needs of emergent bilingual learners. Importantly, these immersive learning opportunities can motivate teachers to critically examine their routine teaming practices and consider embracing the enhanced learning dividends that can be realized for themselves and their emergent bilingual students through learning how to work together in new ways as *multilingual, cross-curricular instructional planning teams*.

The resulting outcome of changing teachers' pedagogical mindsets and instructional teaming practices through involvement in this kind of intensive professional learning intervention program is developing in teachers' minds a new more informed understanding of the instructional support needs of their emergent bilingual students and a renewed enthusiasm for nurturing *team-centered, collaborative teaching and learning cultures* on their campuses that can expand meaningful biliteracy peer learning and sharing opportunities for emergent bilingual and native English-speaking students.

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