

RESEARCH ARTICLE

Creating Equitable Spaces of Care and Hope: Middle School Teachers' Perceptions of Biography-Driven Instruction

Jinhua Wang a*, Socorro G. Herrera a, Melissa A. Holmes a, Kendra Herrera a

Article Info

Received: May 6, 2024 Accepted: July 19, 2024 Published: August 12, 2024

Abstract

Despite the ever-increasing share of culturally and linguistically diverse (CLD) learners in the US, they remain underserved in many educational settings. Their educational goals, individual assets, and needs are yet to be appropriately addressed. This status quo creates an imperative for teacher educators to enact culturally responsive teaching (CRT) and culturally sustaining pedagogy (CSP) in substantial ways to foster an equitable and inclusive learning environment. In this qualitative case study, the authors explored how 10 middle school teachers utilize culturally responsive/sustaining pedagogy with middle school CLD students. They investigated teachers' perspectives on Biography-Driven Instruction (BDI) and their experiences with its pedagogical applications in their classrooms. The research findings demonstrated the applicability and feasibility of BDI for implementing the principles of CRT and CSP in CLD classrooms to promote pedagogical transformation among the study participants. This approach has multifaceted benefits for CLD learners' engagement, language development, and learning across content areas.

Keywords

biography-driven instruction (BDI); culturally and linguistically diverse (CLD) learners; culturally responsive teaching (CRT); culturally sustaining pedagogy (CSP); middle school classrooms

INTRODUCTION

With the rapid development of globalization and immigration, student demographics have changed significantly in current US schools. The number of culturally and linguistically diverse (CLD) learners in classrooms across the country continues to rise, thus constituting a large and ever-increasing share of the student body. 22% of the student population speaks home languages other than English, among which more than 400 languages are represented (NCES, 2023). Despite this growth, they remain historically underserved and marginalized in many educational settings and programs nationwide (Mun et al., 2016). Li (2018) reported that CLD learners "now constitute one-fourth of public-school students in the U.S., but their educational goals and needs are not yet well addressed" (p. 2). These data create an imperative for teachers to enact culturally and linguistically responsive teaching for CLD learners (Irwin et al., 2021). In other words, teachers need to consider students' cultural and linguistic diversity in their curriculum and instruction.

^a Kansas State University

^{*} Contact Info: 1114 Mid-Campus Dr. North, Manhattan, KS 66506, the U.S.A., jinhuawang@ksu.edu

Among many educators, the linguistic and cultural diversity of CLD learners has been considered a deficit or liability instead of an asset to the school (Mellom et al., 2018). Following this deficit perspective, school districts historically are not equipped with enough teachers and staff members who understand the processes and challenges of second language acquisition to serve students effectively (Dwomoh et al., 2023; Hopkins & Schutz, 2019; Mason, 2022). Many teachers lack expertise in balancing the teaching of content knowledge and language/literacy and are not prepared to teach this growing group of learners in the United States (Carrejo & Reinhartz, 2014; Coady et al., 2016; Ponzio, 2020; Yoon & Pratt, 2023). Teachers predominantly report feeling underprepared to work with CLD learners (Carbonneau et al., 2022; Grant et al., 2021; Santibañez & Gándara, 2018). Therefore, these learners do not receive sufficient attention and accommodations to tend to their unique assets and needs, nor do they have equitable access to the curriculum across content areas.

Instructional responsiveness also requires teachers, especially at the middle school level, to consider students' socioemotional needs. Middle school learners face identity shifts, changing academic expectations, and increasing pressures of acquiring high school preparedness and career readiness. As students enter adolescence, they develop cognitively, physically, socially, emotionally, and academically all at the same time. They transition from spending the whole day with one teacher and one group of students to having different teachers for different subjects and engaging with varying groups of peers throughout the day. Compared to elementary education, the middle school curriculum is more advanced, and students must be more responsible for their learning. Meanwhile, middle school students also are in the process of exploring their identity, discovering their likes and dislikes (e.g., extracurricular activities), and finding ways to express their individuality. On top of these developmental realities, middle school CLD learners face the challenge of developing English proficiency—and learning content through this additional language. Therefore, to effectively promote linguistic and academic growth, middle school teachers must consider the multifaceted assets and needs of the students they serve.

Schools in the U.S. are legally required to serve the increasingly diverse student population equitably. However, the general curriculum is not designed to holistically address CLD learners' socioemotional, sociocultural, and language acquisition needs (Herrera & Murry, 2016). Pacheco and Hamilton (2020) also argue that educational research and practice typically undervalue CLD learners' unique subjectivities because they do not fully fit in the mainstream classroom with regard to language proficiency, academic achievement, and



conceptualization of a "good" student. Thus, the tension between the general curriculum and middle school CLD learners' individual needs requires teachers to take action. Teachers will first need to learn about CLD learners' biographies, utilize effective approaches, and tailor instructional strategies to meet CLD learners where they are. An equitable and inclusive classroom environment is also needed to nurture CLD learners to engage in effective learning.

Although some efforts have been made to support CLD learners in increasingly equitable and effective ways, they often continue to be underserved and unlikely to achieve their social, linguistic, and academic potential (Yoon, 2023). In this paper, the research focuses on how middle school teachers explored CLD students' biographies to help bridge learners' individual needs and the curriculum, with the goal of creating a more equitable, inclusive, and responsive classroom environment to engage all students in effective learning.

LITERATURE REVIEW

Culturally Responsive Teaching and Culturally Sustaining Pedagogy

Osei-Tutu and colleagues (2022) argue that when teachers are trained to view and teach with a critical lens and embrace the concepts that work toward diversity and inclusion, they can better assist and support their students' learning. Conceptualizations of equity-centered pedagogies, such as culturally responsive education (Cazden & Leggett, 1976), culturally responsive pedagogy (Irvine, 1990, 1992), culturally relevant pedagogy (Ladson-Billings, 1995), culturally responsive teaching (Gay, 2010), culturally sustaining pedagogy (Paris, 2012), and culturally proactive teaching (García & O'Donnell-Allen, 2015) have been designed to promote equity and inclusion in teaching and learning for students of color since the 1970s. Among these pedagogies, culturally responsive teaching and culturally sustaining pedagogy are the most frequently emphasized in educational scholarship. Despite the increased focus on utilizing students' cultural assets to make the curriculum more relevant and meaningful, early equity pedagogies did not attend to the linguistic needs of CLD learners. Lucas et al. (2008) introduced the term *linguistically responsive teaching* to focus specifically on the teacher's role in meeting the needs of CLD learners whose primary language is not English.

Culturally responsive teachers are expected to "teach the whole child" (Gay, 2010, p. 32) and apply "the cultural knowledge, prior experiences, frames of reference, and performances styles of ethnically diverse students to make learning encounters more relevant to and

effective for them. . . [teaching] to and through the strengths of these students" (Gay, 2010, p. 31). Culturally responsive teaching (CRT) implies drawing upon students' and families' linguistic and cultural knowledge; demonstrating critical care; addressing diversity, equity, and inclusion in the curriculum, school culture, and policy; as well as engaging students in exploring and critiquing social injustice (Howard, 2010; Herrera, 2022). Extensive literature suggests that CRT offers a holistic educational experience for *all* students and can enhance student motivation and connectedness to learning (e.g., Aronson & Laughter, 2016; Gay, 2010). Gay (2018) affirms CRT as a vehicle to build "bridges of meaningfulness between home and school experiences" (p. 37). Thus, culturally responsive teachers capitalize on students' cultural and linguistic knowledge as assets and leverage these assets to foster higher-level thinking skills (Gay 2018).

Culturally sustaining pedagogy (CSP) was developed to extend culturally relevant pedagogy (CRP) (Ladson-Billings, 1995; Paris & Alim, 2017). CSP builds on equity pedagogies, such as culturally responsive teaching and culturally relevant pedagogy (Ladson-Billings, 2017), and aims to "perpetuate and foster — to sustain — linguistic, literate, and cultural pluralism as part of the democratic project of schooling" (Paris, 2012, p. 93). CSP acknowledges CLD learners' multilingual and multicultural assets to empower learning and considers school as a site for perpetuating the dynamic, evolving cultural ways of being of diverse communities (Paris & Alim, 2017). According to Paris (2012), pedagogy needs to do more than be "responsive or relevant to the cultural experiences and practices of young people—it requires that [teachers] support young people in sustaining the cultural and linguistic competence of their communities while simultaneously offering access to dominant cultural competence" (p. 95).

Being culturally responsive is not enough to address CLD learners' needs in meaningful ways. In response to the limitations of asset pedagogies, CSP entails an incorporation of CLD students' home languages and heritage cultures into the mainstream culture and pushes educators to move beyond cultural responsiveness to address unequal power relationships and various disparities in meaningful ways. Teachers should draw from "contrasting worldviews" (Puzio et al., 2017, p. 224) and not simply view CSP as matching instructional practices to home and community experiences. Instead, teachers should critically reflect upon, compare and contrast, and embrace the diverse cultures that CLD learners bring to establish positive and sustaining relationships with students, families, and communities. As Aghasafari et al.



(2021) point out, building positive and sustaining relationships with students, families, and communities can help teachers decide how to better implement CSP.

Classroom Applications of CRT and CSP

Research on the importance of applying culturally responsive teaching (CRT) (Gay, 2010) and culturally sustaining pedagogy (CSP) (Paris, 2012; Paris & Alim, 2014) in middle school classrooms has received increasing attention over the last decade (Cavallaro & Sembiante, 2021; Kim et al., 2019; Larson et al., 2018; Milner, 2016; Robins et al., 2023; Smith, 2020). Both CRT and CSP center on social justice and consider the classroom a site for social transformation (Aronson & Laughter, 2016). Such equity- and identity-focused approaches to instruction validate and leverage students' backgrounds in their learning.

Studies have examined how CRT and CSP have impacted instruction and learning across different content areas in middle school CLD classrooms. Not surprisingly, numerous studies have attested to the positive impacts of CRT and CSP on students' learning and teachers' instruction, with additional benefits related to students' behavior and social-emotional growth. Studies related to implementing CRT and CSP into various content areas and curriculums at the middle school level have indicated some common outcomes, such as increased cultural responsiveness, more positive teacher dispositions, greater validation of learners' knowledge, and stronger classroom relationships.

According to some researchers (Coppola et al., 2019; Smith, 2020; Robins et al., 2013), students responded positively to teachers' cultural responsiveness throughout ELA instruction, as evidenced by improved critical thinking and academic success as well as better peer-to-peer relationships and teacher-student relationships. Relationship building in the classroom is important for creating a validating and culturally responsive learning experience. Milner (2016) mentioned factors that influence such relationships in math class, including the identities of teachers and students, the validation and affirmation of students in the context of their work, and teachers' interrelated dispositions toward teaching and learning, which have implications for students' affective and cognitive experiences.

Learning about and being responsive to students' unique identities can also have a positive impact on students' socio-emotional growth. In a science class, when teachers have limited understanding of students' backgrounds and lack resources to connect content knowledge to students' funds of knowledge, they tend to focus on setting up expectations and discipline; meanwhile, students tend to experience such classrooms as lacking values worthy

Wang et al. (2024) 1(1), 31–78

of respect and rules worthy of following (McGlynn & Kelly, 2018). Controlling students' actions is not the goal of teaching; rather, it is about establishing a way for students to connect with the content in meaningful ways (McGlynn & Kelly, 2018). Integrating CRT into the curriculum creates a meaningful and equitable space for supporting CLD learners' socioemotional growth. Students in culturally responsive classrooms feel empowered to reflect critically on their interactions with the world, navigate their own social and emotional learning, and become socially responsible individuals making contributions to their schools and communities (Barnes & McCallops, 2019; Heineke et al., 2023; Lau & Shea, 2022).

Jackson and his colleagues (2022) examined technological pedagogical content knowledge (TPACK) in 1:1 laptop classrooms. They found that fully implementing equitable approaches in a 1:1 laptop school requires educators to develop knowledge and skills to integrate TPACK and CSP because technology is a powerful tool in fostering an equitable classroom environment. However, Tigert and Leider (2022) argue that concentrating efforts for CLD learners only in the core content areas is a too limited approach, and we cannot ignore the need to use culturally and linguistically responsive pedagogy for developing art education (e.g., art, music, dance, theatre). Similarly, other elective courses also need attention. Lu and Troyan (2022) suggest using CRT and CSP in Chinese language classrooms to prepare teachers to create more inclusive and culturally sustaining world language classrooms for the diverse populations they serve.

Although the above studies collectively demonstrate the power of CRT and CSP to increase student engagement and critical thinking, facilitate relationship building, and promote learners' social-emotional well-being, language/literacy development, and academic outcomes in middle school classrooms, they also illustrate that educators face numerous challenges. For instance, music teachers identified their lack of knowledge, confidence, and experience as legitimate and significant barriers to integrating local cultures into their curriculum (Cronenberg et al., 2023). Assessment is another integral element of teaching, but the field has been less clear about how teachers would use assessment effectively in multilingual classrooms (Lyon, 2022). Teachers need substantial guidance to overcome these barriers to better serve CLD students. Even with a commitment to inclusive excellence, diversity, and social justice, online course teachers need examples of activities that can be used to make culturally and linguistically responsive practices a reality (Darling-Aduana et al., 2022; Woodley et al., 2017). Teachers would benefit from the exemplary practices of those who enact CRT and CSP in response to CLD learners (Smith, 2020). Additional studies

Wang et al. (2024) 1(1), 31–78

are needed to examine the intersections of teachers' racial and ethnic identity, the curriculum, and the social context of teaching and learning (Milner, 2016).

When applying CRT and CSP into classrooms, Pacheco and Hamilton (2020) argue that by drawing on "bilanguaging love" as an equity-oriented guiding principle, oppressive conditions can be countered by elevating CLD learners' borderlands epistemologies and knowledges in schools. They believe that bilanguaging love for the translingual, transcultural, and transnational practices and experiences of CLD learners can expand the possibilities for addressing their social, political, and educational struggles. Similarly, Noddings (1984) notes, "caring should be at the heart of the educational system" (p. 393). Davila and Linares (2020) discuss that teachers' perceptions of care have consequences as CLD learners have limited power to resist or transform structural inequalities in schools. Their research indicated that teachers inserting critically engaged empathy in developing trusting relationships with CLD learners help create positive classroom climates, reduce absenteeism, and lead to greater academic engagement over time. Thus, enacting "bilanguaging love" and "caring" can have long-term benefits for CLD learners, especially those who face numerous challenges in and outside of school.

To conclude, despite a growing body of literature demonstrating how middle school educators have integrated CRT/CSP to increase equity and inclusion in the classroom, many teachers' understandings of such approaches stay at a philosophical and theoretical level. Few studies have examined how teachers use CRT/CSP to guide professional learning and instructional practices reflective of cultural responsiveness/relevance (Galloway et al., 2019). Teachers need concrete guidance and strategies to support applications of theory in practice (Kotluk & Aydin, 2021; Samuels, 2018). Holding similar perspectives, Soodmand Afshar and Yousefi (2023) argued that in classrooms with CLD learners, teachers' critical cultural awareness was not enough to support CLD learners.

Teachers need additional support (e.g., teacher training programs and professional development opportunities) focusing on how to shift from a traditional approach to more culturally responsive and sustaining practices for CLD learners. It is not enough to shift mindsets and nurture more cultural awareness if teachers intend to become culturally responsive/sustaining and create truly equitable learning environments for students. Middle school teachers need to transition from a superficial/theoretical understanding to a more action-oriented application of knowledge so that their teaching benefits CLD students' learning in tangible ways. Scholars such as Yoon (2023) similarly acknowledge the



importance of being responsive to student cultures and languages, yet teachers lack the needed support when implementing the theory in practice. Closing gaps in resources, access, opportunities, and outcomes for CLD learners requires teachers to understand and enact culturally responsive teaching/culturally sustaining pedagogy in substantial ways (Khalifa et al., 2016).

The current study, which centers on teachers' use of Biography-Driven Instruction in middle school classrooms, seeks to address this gap. Herrera (2010, 2016, 2022) proposes Biography-Driven Instruction as an instructional framework to enact culturally responsive teaching and culturally sustaining pedagogy while attending to the learner's unique sociocultural, linguistic, cognitive, and academic assets and needs.

Biography-Driven Instruction as the Theoretical Framework

Biography-Driven Instruction (Herrera, 2010, 2016, 2022) is a learner-centered, asset-based, application-focused, and inclusive approach to teaching. The theoretical foundations of BDI are situated within the context of prominent efforts towards liberatory practices at the intersection of culturally relevant pedagogy, culturally responsive teaching, culturally sustaining pedagogies, and antiracist education (Herrera, 2022). Teachers use BDI to identify individual CLD student assets and needs and correspondingly scaffold the content and language of the lesson in ways that enhance the cultural relevance/responsiveness of the curriculum and their instructional practices. BDI offers instructional processes and more than 20 practical strategies for teachers (Herrera et al., 2011; Herrera et al., 2017), and it guides educators to anchor their CRT and CSP efforts in students' biographies.

Figure 1 illustrates that the learner's biography encompasses four interrelated dimensions: sociocultural, linguistic, cognitive, and academic (Herrera, 2022). CLD students may share the same race, ethnicity, culture, and native language, but they each bring their own experiences and expertise to the classroom. Through constructive and creative ways of leveraging students' biographies as assets in learning, BDI (Herrera, 2010, 2016, 2022) was designed to move "from culturally relevant, responsive and sustaining theory to pedagogical enactment" (Herrera, 2022, p. 11). It has proved applicable to middle school teachers, regardless of curriculum and content area, to scaffold and foster engaged learning of CLD learners, including emergent bi/multilingual learners (Early, 2019; Herrera, 2016; Kim et al., 2019; Store, 2023). This wide applicability is possible because BDI connects CLD students' particular biographies to the content of the curriculum, relying on learners' documentation of

background knowledge, active construction of meaning, and production of language as the foundation for instructional responsiveness.

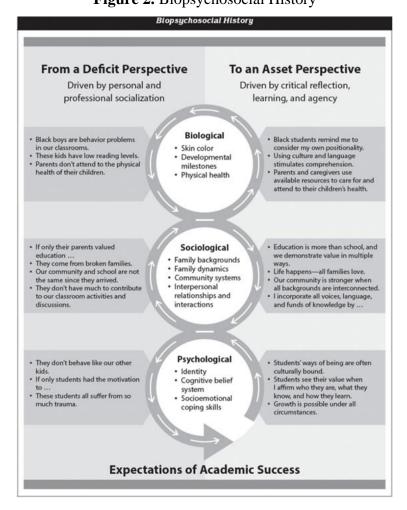
Biography-Driven Perspective LINGUISTIC Comprehension L1& L2 Communication L1& L2 Expression L1&L2 SOCIOCULTURAL Life Laughter Love COGNITIVE ACADEMIC Know Access Think Engagement Apply Hope **BIOGRAPHY-DRIVEN PERSPECTIVE**

Figure 1. Biography-Driven Perspective

Adopted from Herrera et al. (2022, p. 34)

Additionally, BDI takes into consideration the biopsychosocial history of the learner, as illustrated in Figure 2, which encompasses the most basic elements of human experience (i.e., the biological, psychological, and sociological aspects of an individual) (Engel, 1978; Gates & Hutchinson, 2005; Herrera et al., 2020). By attending to the experiences and factors that influence learners' perceptions of self, community, and the larger world, teachers become better positioned to navigate interactions with CLD students and families, nurture learners' holistic development, facilitate student collaboration, and guide learners to achieve learning goals (Herrera, 2022). According to Herrera and colleagues (2023), increased attention to learners' biographies and biopsychosocial histories enables teachers to highlight assets and cultivate classroom ecologies that nurture and challenge CLD students to reach their potential. Teachers intentionally integrate all these elements (e.g., students' lived experiences, social and cultural beliefs, language histories, and social-emotional needs) into lesson planning and delivery.

Figure 2. Biopsychosocial History



Adopted from Herrera et al. (2022, p. 21)

When implementing lessons utilizing BDI, teachers first activate students' background knowledge (home, community, school) about the topic (Herrera, 2022). Students are the "experts of their own narratives and experiences (Cavallaro & Sembiante, 2021, p. 177)" and their personal experiences and existing linguistic knowledge function as a powerful catalyst to enhance the connectivity of content/topics, boost their confidence in learning, increase their engagement in class strategies and activities, and promote their cultural and linguistic competence. As such, the activation phase, in which students document their background knowledge utilizing a "tool in the hand," is pivotal to the teacher's ability to harvest words, ideas, and experiences anchored in students' biographies that will be utilized to facilitate meaning-making throughout the remainder of the lesson. Teachers then facilitate connections between the known (students' background knowledge) and the unknown (new content and language), scaffold in ways that address learners' needs, leverage their assets, and maximize peer interaction. Ultimately, teachers affirm students' linguistic and academic development.

To better support theory-into-practice application, Herrera (2022) provided an asset-based lens to view CLD learners (e.g., CLD student biography card), strategy templates, explicit explanations on how to use or modify the templates as needed, and student work artifacts as a guide for teachers/practitioners. Although BDI strategies are intentionally designed to support the implementation of CRT and CSP, teachers can enact the philosophical tenets and methodological principles of BDI in additional ways as well. A classroom observation tool further supports coaching, mentoring, and self-assessment of effective instructional practices for identifying and leveraging student assets to transform teaching and learning in educational spaces.

A growing body of research has investigated teachers' perspectives on the benefits of BDI-oriented professional development and BDI-related teaching outcomes among CLD learners. Specifically, BDI has been enacted in inclusive teaching and learning contexts at elementary levels with positive outcomes reported, including improved student engagement, language proficiency, and literacy (Holmes, 2023; Holmes et al., 2018; Murry et al., 2021; Murry et al., 2020). It also has been proven applicable and effective at secondary levels across content areas, including mathematics (Store, 2023), science (MacDonald et al., 2013), ELA (Early, 2019), and social studies (Kim et al., 2019). As noted by MacDonald and colleagues (2013), BDI strategies afford teachers new ways to reinforce and reward not only student engagement in learning but also incremental progress toward learning goals. These studies indicate the effectiveness of BDI in supporting educators to make the curriculum accessible, relevant, and rigorous, as well as to provide equitable access to CLD learners, including multilingual learners. However, limited literature was found that exclusively focused on the pedagogical implications of using BDI in middle school contexts. Additional research is needed to explore middle school teachers' applications of BDI with CLD learners across content areas.

METHODS

The authors explored how teachers utilize culturally responsive/sustaining pedagogy with middle school CLD students. Specifically, the purpose of this study was to investigate 10 middle school teachers' perspectives on BDI and their experiences with pedagogical applications of BDI in their classrooms. As previously described, BDI served as both a pedagogical approach and the theoretical framework guiding this research. The goal of this study, like most qualitative educational research, was to explore and understand people's



experiences in-depth (Patton, 2015), but not to generalize or predict a trend across a broad population. According to Yin (2009), a case study is commonly used in qualitative research to answer focused 'How' or 'Why' questions with in-depth inquiries.

The authors employed a qualitative case study inquiry to support their ability to construct narratives that emerged out of in-depth understanding of the participants' BDI experiences. The case study design provided a lens to interrogate how the middle school teachers perceive they interact with CLD learners and how their perceptions of BDI shape their instruction. This study explored the following research questions:

- 1. In what ways do middle school teachers perceive their use of BDI in CLD classrooms?
- 2. How do middle school teachers perceive they utilize BDI to create more equitable and inclusive learning environments?

Subjectivity of the Researchers

The authors of this paper bring diverse ethnoracial backgrounds, including Asian (1), Caucasian (2), and Hispanic/Latina (1). All four researchers have experience with supporting language and academic growth among PK-12 CLD students. In addition, each author has experience with learning a second language. Two authors are bilingual, with native language capacities in Spanish/Chinese; they learned English as an additional language during their PK-12 education. The other two authors are native English speakers, who gained varying levels of Spanish proficiency through secondary/post-secondary education and life experiences. Collectively, the authors have experience teaching in English as a Second Language (ESL) and English as a Foreign Language (EFL) contexts and administrative experience at the middle school and high school levels. The collaborating scholars engaged in this research as part of a federally funded project at a predominantly white Midwest university. One of the researchers was the lead professor for the participants' coursework and facilitated data collection. The other researchers supported data collection and analysis.

Research Site and Participants

A qualitative case study was designed to gain insights into the ways 10 middle school teachers utilized the BDI instructional framework to assist CLD students. Eight different schools across three Midwest school districts served as sites for this qualitative case study. The teachers were bound as a group by having engaged in graduate-level ESL endorsement



coursework to increase their capacities to serve CLD students effectively. The ten teachers had all completed three courses in ESL instruction for CLD learners. The courses were designed to support the implementation of BDI, with practical strategies and tools provided to facilitate theory-into-practice applications in daily instruction.

Teachers learned course content utilizing the same types of BDI strategies they were later asked to apply in classroom practice with their own learners. For each course, teachers were expected to complete Consult, Elaborate, Confirm (CEC) assignments after each session. Teachers were encouraged to include student work artifacts to help demonstrate their understanding and practices reflective of BDI. The purpose of these post-instructional exercises was to provide a structure for *theory-into-practice* translations of course content as well as *site-specific applications* to practice with school and classroom diversity. Using this structure, course participants worked as a team to:

- dialogue and collaborate (*consult*) with peers from professional practice as to consistencies of understanding about the instructional content of the session,
- critically reflect upon, debate (e.g., challenges/strengths), and differentiate (*elaborate*) what they have learned from session content through differentiated strategies for their own schools/classrooms,
- field-test key BDI strategies and verify (*confirm*) the impacts of theory-into-practice applications on the cognitive and academic growth of CLD and other students.

The participants were identified based on purposeful sampling (Patton, 2002). All participants were among those selected as top performers based on their demonstrated passion and commitment to learning about BDI and utilizing BDI strategies in their classrooms, as evidenced in coursework and in-classroom observations. Each participant also taught in typical classroom contexts.

The 10 teachers' profiles varied by race/ethnicity, gender, content area, grade level(s), and years of teaching experience. The participants reflected diverse racial backgrounds: African American (1), Asian American (1), Caucasian (5), Hispanic/Latina (2), and Native American (1). The majority of the teachers were female (9 females, 1 male). The most commonly taught content area across classrooms was English language arts (4 participants), followed by math (2 participants). The remaining participants variously taught social studies, science, or ELL. The grade most commonly taught was 6th grade (4 teachers). One participant taught 7th grade; another taught 8th grade. Two teachers taught both 7th and 8th grade. In the

ELL classroom, the two co-teachers taught 6th, 7th, and 8th grade multilingual learners. The participants' years of teaching experience also varied, with five teaching for 20+ years, three teaching between 10-19 years, and two teaching for 8 years. Table 1 summarizes the participants' profiles. It also includes the BDI strategy utilized by each teacher during their recorded lesson (see Data Collection).

Table 1. Teacher Profiles

Participant	Race/Ethnicity	Gender	Subject	Grade	Years of Experience	BDI Strategy
1	Hispanic/Latina	Female	ELA	6th	8	Extension Wheel
2	Native American	Female	ELA (Reading)	6th	12	DOTS Chart
3	Caucasian	Female	ELA	7th, 8th	29	3 Column Notes
4	Asian American	Female	Math	7th, 8th	21	Guided Notes
5	Caucasian	Female	Math	8th	20	Linking Language/ Gallery Walk
6	Caucasian	Female	ELL (co- teacher)	6th, 7th, 8th	19	KWL
7	African American	Female	ELL (co- teacher)	6th, 7th, 8th	8	KWL
8	Caucasian	Male	Social Studies	6th	21	Linking Language
9	Caucasian	Female	Science	6th	23	DOTS Chart
10	Hispanic/Latina	Female	ELA	7th	13	Vocabulary Quilt

The 10 participating teachers served diverse classroom communities. Among the 203 students represented across the focal classrooms, 33 learners (16%) were identified as English learners, and 33 learners (16%) were identified as students in special education with IEPs. The largest number of countries of origin represented in one class was seven (the average was four). The largest number of languages reflected in one class was four (the average was three). Across the classrooms, two students were reported as being homeless. The average number of total learners in each classroom was 20, with 27 students in the largest classes and 18 students in the smallest classes.

Although BDI has specific strategies that are provided for teachers to use as a guide, teachers do not have to use BDI strategies to engage students in learning. Other types of

strategies can also be used in BDI-oriented classrooms, as long as the strategies help students go through the phases of activation, connection, and affirmation. Teachers can also take full advantage of the learner's biography and their own creativity to adapt BDI strategies to engage CLD students in learning. Table 2 features some of the BDI strategies as well as some common strategies used by participants to examine the utility of BDI.

Table 2. BDI Strategies and Other Strategies

Strategy	Grade Level Used	BDI Connections	
Extension Wheel	6th ELA	It allows students to think of all the words and experiences they associate with the topic. As students move from the inside out, the strategy provides a bridge from their background knowledge to new learning. See Appendix A for the strategy overview and template.	
DOTS Chart	6th ELA (reading); 6th Science	It allows students to use pictures, signs, symbols, and words in both L1 and L2 to make public their immediate connections with the topic. See Appendix A for the strategy overview and template.	
3-Column Notes (Tri- fold)	7th/8th ELA	It allows students to activate all words and ideas (e.g., actions) they associate with the three curricular topics/words.	
Guided Notes	7th/8th Math	It provides a structured format that helps students follow along with new learning. It supports active engagement that promotes comprehension and retention. It also ensures that all students have access to the same information.	
Linking Language	8th Math; 6th Social Studies	It allows students to make connections between new vocabulary and concepts and the words and ideas they already know. It helps students by making new content more relatable, enhancing comprehension, and building confidence in using a new language. See Appendix A for the strategy overview.	
Gallery Walk	8th Math	It allows students to move around and interact with information making the learning process more dynamic, fosters collaboration, allows for practice of speaking and listening skills, and creates a supportive and interactive learning environment.	
KWL	6th, 7th, 8th ELL (co- teacher)	It provides a structured yet flexible framework that supports students in making connections to background knowledge, setting goals, and reflecting on new learning, all of which contribute to a deeper understanding and retention of the material.	
Vocabulary Quilt	7th ELA	It allows students to activate background knowledge about the vocabulary they will need for the new learning. Pictures, signs, symbols, and words in L1 and L2 can all be used to record notes and add new notes throughout the lesson. See Appendix A for the strategy overview and template.	

45

Data Collection

Primary sources for data collection were 10 semi-structured interviews, 10 video-recorded classroom observations, and participants' demographic profiles and written reflections. All data was collected during the Spring of 2023. The 10 classroom observations were completed during the participants' normal classes on a regular school day with a focus on how teachers used BDI strategies to engage CLD students in learning. Consent was provided by each teacher, staff member, and student who participated in the documented lesson.

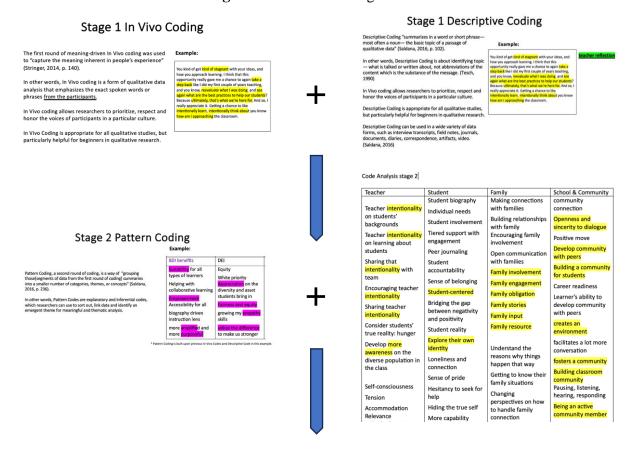
The semi-structured interviews were conducted via Zoom after the class observations over the span of 4 weeks. An interview protocol was followed (see Appendix B), with follow-up questions specific to the individual teacher and based on the teaching and learning interactions that were observed. The interview questions related to participant's profiles, experiences working with CLD learners before taking BDI coursework, professional challenges prior to BDI training, specific changes in instructional practices after BDI coursework, outcomes resulting from the use of BDI, and recommendations and modifications to be used for future professional development planning.

Each interview lasted approximately 60 minutes and was recorded with consent from the participant. Interviews were used because, as Van Manen (1990) stated, they help us "understand fully the complexities of many situations and help researchers to observe the participants directly as they engage in their phenomenon of interest" (p. 45). Understanding the similarities and differences among each participant's perceptions regarding the use of BDI with CLD students was critical to this study. The interviews allowed the researchers to gain a deeper understanding of teachers' perceptions and ways their use of BDI had an impact on CLD students' linguistic and academic outcomes. The individual interviews served as the focal source of data for this study.

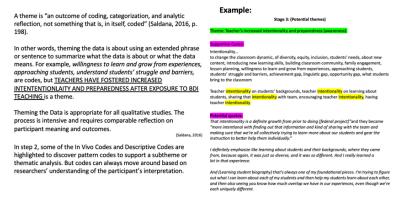
Data Analysis

Data analysis comprised three rounds of coding. Figure 3 shows the flow of the coding process utilized. The first round of meaning-driven In Vivo coding was used to "capture the meaning inherent in people's experience" (Stringer, 2014, p. 140). In other words, In Vivo coding is a form of qualitative data analysis that emphasizes the exact spoken words or phrases from the participants. In Vivo coding allows researchers to respect and honor the voices of participants in a particular culture. In this study, the teachers collectively shared the culture of being biography-driven in their approach to professional practice.

Figure 3. Flow of Coding Process



Stage 3 Theming the Data



In Vivo, coding relies on the participants themselves to ascribe meaning to the data and can be helpful in understanding the stories, ideas, or perspectives through the actual words of the participants. For each participant, the first round of coding resulted in a list, or summary, of words or phrases that captured their personal voices and experiences. The second round of coding involved pattern coding, which was used as "a way of grouping those [In Vivo codes] summaries into a smaller number of categories, themes, or concepts" (Saldaña, 2013, p. 236). The third round of coding focused on coding for "the development of major categories or



themes from the data" (Saldaña, 2013, p. 240). After coding individual teacher data, an inductive thematic analysis was used to examine the perspectives of different participants, highlight similarities and differences, and thus generate insights to answer the research questions (Braun & Clarke, 2006; King, 2004).

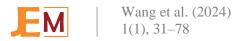
FINDINGS AND DISCUSSION

The findings of this qualitative case study shed light on middle school teachers' perspectives and experiences with the application of biography-driven culturally responsive/sustaining pedagogy in Midwest schools. Specifically, the research findings offer insights into 10 middle school teachers' perspectives on their implementations of BDI in CLD classrooms, including the ways they explore learners' biographies to maximize the strengths and meet the needs of CLD students. The findings illustrate how the participating teachers created more equitable and inclusive learning environments for CLD students to be successful linguistically and academically.

Based on participants' shared perspectives, two broad recurrent themes were drawn: 1) teacher beliefs and pedagogical practices, and 2) professional growth and teacher commitment. In the discussion to follow, the authors present each broad theme and explore subthemes to elaborate, situate, and contextualize the research findings. The highlighted interview excerpts illustrate the subthemes, addressing how participants perceived their use of BDI in CLD classrooms and how they implemented BDI to create effective learning spaces for CLD students.

Teacher Beliefs and Pedagogical Practices

The first broad theme reflects how participants have changed their beliefs and classroom practices after BDI training and application. They believe BDI is the appropriate approach to uplift student voices, care for students, and give students hope for their academic success. This theme encompassed the ways teachers utilized the biographies of students to accommodate their individual needs, maximize connections to the curriculum, and create learning environments that fostered language development and academic growth. Three subthemes emerged from the data analysis: 1) validating learners and leveraging assets, 2) removing barriers and strengthening bridges, and 3) nurturing independent learners and building class community.



Validating Learners and Leveraging Assets

Participants perceived that BDI has helped them develop their empathetic skills, foster cultural responsiveness and relevance, value students' cultural wealth and funds of knowledge, and add more voices and perspectives in the curriculum. Every student wants to be seen, heard, understood, respected, cared for, and loved. With its emphasis on discovering and documenting what learners bring to the lesson, BDI positions teachers to utilize those insights to teach the target content and language (Herrera, 2022). Reflecting on the role of BDI in her seventh grade ELA classroom, one teacher shared:

I think everybody wants to have their voice heard in some way, and a lot of times if a student doesn't feel confident in the language or in the skill, they're happy to sit back and just kind of observe, but you know, I think Biography-Driven Instruction allows kids to have their voice heard in small and big ways and that just builds a lot of confidence and it is really validating for them and you see a lot of growth because of it.

When teachers afford all students opportunities to contribute their ideas, experiences, and language, students see themselves as equally valuable members of the learning community. They take risks to engage and produce, knowing that what they share will be validated and used to advance learning (Holmes, 2022). This cycle of responsiveness (i.e., teacher gathering student assets and then utilizing them during instruction) bolsters students' confidence and reinforces their view of themselves as competent, capable learners.

An ELL teacher who has integrated BDI into her teaching shared how BDI has changed her assumptions about CLD learners, resulting in her shift from a traditional (deficit) view to an asset-based perspective.

I have more patience now. They're learning and I also don't want to discount the talents that they bring into the school, whereas I don't know if I would have been aware of that my first couple of years...When we're working with these ESL kids...just because they don't have the skills that we think doesn't mean that they don't have skills or talents. And we should bring those in...When you bring [ESL kids' skills and talents] in, you're not only building the relationship, you're giving them the self-esteem, you're giving them that kind of empowerment that they need to not want to disappoint you, to want to do better on the academics that you want them to learn.

As this teacher emphasized, teaching through a BDI lens means valuing and utilizing the skills and talents that CLD learners bring. At the core, however, is the development of teacher–student relationships, which foster students' personal investment in learning. When teachers truly embrace the diversity that exists within their community of learners, they



demonstrate through their actions that they respect and value CLD learners' skills and talents; CLD students, in turn, are motivated to give their best in their academic work.

Participants also articulated that CLD students often struggle to express themselves for a variety of reasons (e.g., peer pressure, self-identities that differ from those of peers, feelings of not being accepted). Every student comes to the classroom with a unique biography. Even if two students have the same race or ethnic heritage, they have different stories to share. Participants asserted that BDI has helped students increase their openness and confidence and promote their collective well-being. For instance, a sixth-grade ELA teacher explained that in her classroom: "You're going to talk about who you are and where you're from . . . making certain that the student biography is interwoven through everything we do." This teacher recognized the multiple paths that students take toward the same learning goal. Students approach the curriculum from their individual starting points and distinct vantage points. Teachers' responsiveness to the multiple dimensions of the learner's biography ensures they are meeting students where they are.

The teachers in this study used BDI to address the tension that typically exists between CLD learners and the curriculum. The teacher responses explored for this subtheme align with existing research indicating that culturally responsive teaching leads educators to emphasize inclusive instructional practices that allow students to bring their unique cultures and voices into the curriculum (Galloway et al., 2019). In this study, teachers intentionally attended to each student's unique biography to establish more cultural responsiveness and cultural relevance during instruction and to create a more accessible and equitable space for CLD learners to be engaged in content-area learning. Participants applied what they learned from the coursework to professional practice in their classrooms. They encouraged CLD students to use their home language or prior knowledge/experience to make sense of the new vocabulary/content. CLD learners were allowed to draw pictures, signs and symbols, write in their first language, or simply convey themselves in the way in which they were most comfortable to represent their thinking process. Teachers then situationally responded to what students produced to bridge a deeper understanding of the content, facilitate student conversations, and promote applications of learning.

Removing Barriers and Strengthening Bridges

The changes in perspectives that participants attributed to BDI and perceived as long-lasting were not limited to interactions with students in the classroom. Instead, they extended to



interactions with parents and families as well. An eighth-grade math teacher appreciated how BDI has had a positive impact on her perspective toward CLD parents and her communication with them:

I didn't have that appreciation always, especially dealing with parents, you know what I mean like it [BDI] really changed my perspective. I was super scared every time I had to call parents that didn't speak English well and it [BDI] really gave me a different perspective on them.

This participant's response highlights the perceived value that BDI has brought to her relationship-building with parents. When familial stakeholders in the students' learning are viewed from an asset-based perspective, family engagement becomes a more visible reality. Increased home–school communication, interaction, and reciprocal learning become a possibility when parents, caregivers, and families know that their knowledge and experiences are welcomed and valued and will be used to support their child's learning (Herrera et al., 2020). Similarly, such family engagement validates CLD learners and supports them to see greater value in learning.

Participants appreciated that BDI has enabled them to gather multi-faceted data about CLD students and their families, which they use to provide students with multiple entry points to the curriculum. The teacher's disposition, however, is a key factor. An eighth-grade ELL teacher described the negative impact of a teacher's personal bias if they are not open to embracing other cultures.

If you aren't open to understanding how other cultures operate or other cultures run their household or other cultures view certain topics of certain things, you are kind of stuck on the lens of "This is American—ways how we do it."

Such a narrowed lens limits the types of knowledge that "count." It sends the message to students and families that their ways of interacting in the world have less value, in general, and can even be a detriment to the student's learning. A deficit-oriented perspective creates, rather than removes, barriers to equitable access, engagement, and achievement for CLD students.

On the other hand, when teachers approach students and families with the goal of building positive home-school relationships centered on mutual respect and care, the possibilities for expanded learning opportunities increase exponentially for *all* members of the classroom community (Herrera et al., 2020). An ELL co-teacher emphasized the importance of using BDI to see the "whole" student, including the experiences and funds of knowledge that are anchored in the home.



[Getting to know my students] is like a huge piece, especially that first couple of months of school is like just getting to know who they are as people. Because then, when I have that, going into the rest of the year, when we start talking about Kansas history, it's very helpful to have that—like what connections can we make between things that they may have seen, or experienced, or their parents may have even seen, their experience. And so that's at least how I approach, you know a classroom, and again, it's more than just like what is on their profile sheet when they arrive in our country or at our school.

Often educators gather intake information to provide a snapshot of the learner's profile. However, this static information stays at a superficial level and cannot take the place of learning about the lived experiences of the student and family. Such rich experiences add texture to the content, providing alternative perspectives on the curriculum and supporting applications of learning beyond the classroom. Teachers use these sociological aspects of the learner's biopsychosocial history (Herrera et al., 2020) to "really foster communication with students," as noted by one participant, and to create learning spaces that honor who they are as human beings.

Participants shared that BDI has supported multiple pathways for family outreach and the design of authentic family engagement practices. As a sixth-grade science teacher expressed, "The part of the strength that I've gotten through this [BDI-focused] program is a relationship with the students' families. Triangulating just like the family with the students, and then with me and the school and the curriculum." Families of CLD learners play a critical role in content-area learning, sustaining the home language, and supporting students to become literate in both English and the native language. Participating teachers shared ongoing and creative ways to extend bilingual learning experiences into the community and home, as well as ways they welcome the histories and cultures of families into the classroom throughout the school year.

Removing communication barriers also made families feel welcomed and fostered effective, reliable, and equitable school–family partnerships. Participants agreed that "just having the communication and having the relationships is huge. It is an important part of the students feeling safe." An ELL teacher shared the following scenario:

A student from last year who her family is from Ethiopia. And I remember we were doing some project about, they were using physical geography and making their own country. And she was like, "I'm gonna ask my parents," you know, "to help me translate to name all the countries." So, she wrote the entire thing in her language, and she's like, "I sat down with my dad, and we did it, and it was wonderful" …I remember we did a travel brochure and going to different parts, and they could pick a country…a lot of students picked their home country. They're like, "Well, I'm from Honduras…and I'm gonna go talk to my



mom about different foods that we eat" and whatever. So, there are definitely [those family engagement] moments and connections.

Creating opportunities that encourage students to seek out the knowledge and perspectives of family members is one way to build bridges between the home and school. When students' background knowledge—which includes connections to home, community, and school experience—is activated, they are more likely to be motivated to learn, engage in classroom strategies and activities, and contribute to classroom discussions (Herrera, 2022).

Nurturing Independent Learners and Building Class Community

Participants shared that BDI has made it possible for them to gradually release their control and allow students to take ownership of learning. BDI emphasizes providing appropriate assistance for learners in the zone of proximal development (Vygotsky, 1978), giving students enough support to succeed at the task while ensuring a degree of cognitive struggle. Because the teachers in this study had a depth of understanding of their students' assets and needs, they were able to support and challenge them throughout the learning process. An eighth-grade math teacher described the importance of this concept to her teaching:

I think that [the Zone of Proximal Development] is really a super, super important idea because I think that, it's kind of like the lesson that I did, like you take them to what they know and then you like push them a little bit farther and I think that students can't become independent unless they are pushed in that way, but not pushed too hard. You have to really find, it's like that fine line of pushing them a little bit farther but knowing what their capabilities are.

Without a holistic understanding of learners, teachers frequently either water down the rigor of the curriculum or maintain the rigor but provide insufficient support. Both alternatives result in inequitable access to the curriculum for students.

Teachers also perceived that prior to BDI, CLD students walked into classrooms with uncertainty due to language barriers and a lack of native language support; with BDI, they became more engaged and empowered to learn independently because their learning needs were met. A sixth-grade ELA teacher illustrated this point by summarizing her experience with small groups in her class.

End of January, beginning of February, they [small groups of students] were almost entirely independent. They created their own schedule. They picked the book. I picked the groups for the most part, but they were able to work with each other independently and they all, like everyone, carried their own weight because they all trusted each other and had enough cohesion.

In this scenario, students working independently did not mean working in isolation. Rather, students knew they had the steadfast support of their peers. Community building, in fact, was perceived by participants to be one of the pivotal outcomes of implementing BDI. A good class community, as variously described by participants, is "open and honest" and offers a space where "students are more willing to take risks and make mistakes" and where students are vulnerable but "willing to share their difficult stories." It is a place where teachers offer students "that level of tolerance for mistakes" because "we all make mistakes as we're formulating ideas." Community among learners is characterized by the ongoing development of peer trust, support, interaction, acceptance, help, collaboration, and celebration. In BDI classrooms, students learn to "rely on each other" instead of relying on the teachers.

Effective learning happens when students show one another respect, acceptance, support, and care, especially through their willingness to collaborate and learn from each other. As a sixth-grade science teacher shared:

That's my absolute favorite part [of BDI] because I see so much community development. I see so many students coming together and respecting one another's ideas and even acknowledging brilliance like "Wow, what a great connection!" You know, they're like pirating ideas from each other. And I think that's such an acknowledgement to the individual's connection to the topic. And it's wonderful to see because they're giving credit to the person who came up with it, but they're also wanting to say, "Hey, I think this is a great idea," and I love that they're, you know, sharing and applauding each other. I think it's powerful. It's just a great way for not only me to say, "Hey, you get a sticker. This is great work." Even more importantly is their peers' acceptance. Their peers' respect is much more important than mine. So, for them to be able to get that instantaneously, like it's immediate gratification for things they're thinking or ideas they have or it's just an all-around win—win.

In BDI classrooms, the goal is for every member of the classroom community to succeed. Interdependent learning, including borrowing and expanding upon peers' ideas and language, is valued and encouraged (Herrera, 2022; Holmes, 2022). As this teacher noted, the immediate feedback and affirmation provided by peers can be instrumental to students' engagement and sense of belonging. Yet this kind of student interaction does not just happen on its own. As one teacher mentioned, "There is an increased intentionality about knowing students' biography and giving students the time, space, and purpose for building that classroom community..."

An indicator of the degree to which an authentic community of trust has been developed is the type of sharing in which students are willing to engage. Speaking to this point, one participant asserted:



I think it says a lot when students are willing to share their stories and willing to share difficult stories, because we had students share like "I had to move because my family had problems" or something along those lines, and I feel like, in fact, that type of case—being comfortable and vulnerable enough to speak about that—says a lot about the community that we had built into the classroom.

In such classrooms, teachers and students work together to create a safe space where students are willing to be vulnerable and share difficult personal experiences. Because members of the community support one another, students feel safe sharing their stories, practice new language skills, and voice their fears, concerns and challenges, rather than struggling alone in silence.

Cavallaro and Sembiante (2021) remind us that students are "experts of their own narratives and experiences" (p. 177). When teachers use BDI to create contexts for students to leverage their full repertoire of knowledge and skills in collaboration with peers, they harness the transformative power of social constructivist teaching and learning (Vygotsky, 1978). Nurturing independent learners and "creating a class community that feels safe" (as described by a study participant) are key goals of BDI that are realized when teachers observe, listen, scaffold, and facilitate, allowing students to take ownership of their learning in community with their peers.

Professional Growth and Teacher Commitment

The second broad theme characterizes the professional growth and teacher commitment demonstrated by the participating middle school teachers as they utilized BDI to become increasingly culturally responsive/sustaining and effective educators. Participants expressed their gratitude and appreciation for BDI, as they perceived it to have been instrumental to their ability to plan for class learning, foster their own critical reflection, and gain collegial feedback to modify instruction, thereby transforming their classroom practices and enhancing students' academic outcomes. The data analysis yielded the following three subthemes: 1) increased intentionality and preparedness, 2) increased reflexivity and collaboration with colleagues, and 3) feeling empowered moving forward.

Increased Intentionality and Preparedness

After implementation of BDI, all participants reported positive changes in their intentionality, asset-perspective, and preparedness toward responsively accommodating students' individual needs, prior knowledge, home cultures, previous experiences, and native languages.



Participants admitted that "intentionality is a definite growth from prior to doing [federally funded project]." The first step in being intentional was learning about students' biographies, with attention to how their background knowledge could be used to support conceptual understanding and language growth. As a seventh-grade ELA teacher explained:

And that's [learning about the student biography is] always one of my foundational pieces. I'm trying to figure out what I can learn about each of my students and then help my students learn about each other, and then also seeing, you know, how much overlap we have in our experiences, even though we're each uniquely different.

This increased intentionality "of how the student's biography and their own prior knowledge provides them with a foundation for all of the learning" was perceived to have significantly strengthened student-teacher relationships and accelerated learning outcomes, which resonates with the collective research findings from the implementation of CRT and CSP in middle school CLD classrooms. However, the participants in this study went further by intentionally responding to the sociocultural, linguistic, cognitive, and academic dimensions of the learners. Because teachers were more cognizant of students' biographies, they were more likely to design integrative and asset-oriented strategies, processes, scaffolds, and curricula to meet learners' individual needs. For example, a sixth-grade social studies teacher described how he uses his increased knowledge of learners to invite students into the learning process and scaffold their success.

I think I'm just more conscious of what I build in ahead of time, what I front load with a lot of visuals. I think... you know, just time to talk, multiple exposures of, you know, the same thing, being able to draw... So, just a lot of those things I think we talked about a lot through the [BDI] program, just how to make kids feel comfortable how to build, how to front load so that you are building enough background knowledge that they feel confident to have a conversation.

Similarly, a sixth-grade ELA reading teacher concluded that the diverse perspectives that learners bring to the content-area curriculum allow her to orchestrate the teaching and learning process more flexibly and effectively:

Those biographies pull together different perspectives for the topics. I think as a teacher I can manipulate and facilitate better because it's my belief that, as a teacher, I'm the driver of the bus in my classroom, and those are the kind of things that I can navigate to make a better experience for all students, particularly the students that are learning language.

Teaching in this way reflects the primary goal of culturally responsive teaching, which is to "make learning encounters more relevant to and effective for them... [teaching] to and through the strengths of these students" (Gay, 2010, p. 31). The intentional focus of BDI on



the linguistic dimension of multilingual learners is also evident in this teacher's approach to navigating instruction.

BDI guides teachers philosophically to approach learning from a culturally responsive/sustaining perspective, which often requires a shift in mindset. BDI processes and strategies then support teachers in putting this mindset into practice in observable ways. Teachers are able to move beyond their understanding of CRT/CSP at a philosophical and theoretical level to enact these principles at a concrete implementation level as they support student learning.

Increased Reflexivity and Collaboration with Colleagues

Participants highlighted that BDI encouraged constant individual reflection on their instructional practices. As one teacher described, BDI has "helped me reflect on myself as a teacher and how I'm going to teach." Another participant shared that BDI has prompted her to "question what am I doing and what can I change to make sure that I actually understand or can tap into the level of understanding that these students have." BDI also challenged teachers to re-examine their traditional approaches to classroom instruction. Speaking about the way BDI influenced her instructional approach, a sixth-grade ELA teacher participant relayed, "Oftentimes we as teachers teach to the middle, and BDI helped me look at all aspects of how to teach."

Data analysis also revealed that teachers examined their own belief systems and biases along with students' biographies to better connect to students' ways of knowing and support their learning. Participants variously shared that BDI made them "a better teacher," becoming educators who are now "more empathetic to kids" and who continually grow and learn "from the students." The teachers perceived their increased awareness of how they can adjust their instructional strategies and highlight asset-driven practices to "bolster their [learners'] confidence either socially or academically" and cultivate equitable classroom ecologies where CLD students "feel supported," "feel safe," "want to be in my classroom," "want to share with me," and are motivated to take "an academic risk" to reach their potentials. Such individual and collective reflections have immeasurably aided teachers' overall understanding and conceptualization of the possibilities for CLD students, enhancing their ability to promote deeper and more critical thinking and prompt authentic and engaged responses to the curriculum.



Implementing BDI served as a catalyst for the teachers to re-envision their approach to instruction in light of the students they were serving. As an ELL co-teacher reflected:

You develop your curriculum, and you kind of get into the groove of your subject. You kind of get stagnant with your ideas, and how you approach learning. And so, I think that this opportunity [being part of the federally funded project] really gave me a chance to again take a step back like I did my first couple of years teaching, and you know, reevaluate what I was doing, and see again what are the best practices to help our students? Because ultimately, that's what we're here for. I really appreciate it getting a chance to like intentionally learn, intentionally think about how am I approaching the classroom.

BDI additionally inspired participants to collaborate with colleagues in their efforts to be more culturally responsive/sustaining. Referring to the gathering of students' biographical information, one participant explained that implementing BDI prompted her to become "more intentional with finding out that information and kind of sharing with the team and making sure that we're all collectively trying to learn more about our students and gear the instruction to better help them individually." This type of collaborative sensemaking has been shown to be instrumental to theory-into-practice applications of learning in classroom practice (Rom & Eyal, 2019).

Collective learning and sharing about individual students' assets and needs enables teachers to tailor instruction and modify their practices to best respond to and leverage learners' unique biographies. When teams of teachers establish this level of responsiveness as the norm, students are freed to bring their whole selves into the learning process throughout the entire day rather than in only one classroom.

Feeling Empowered Moving Forward

Participants appreciated the suitability and sustainability of BDI for all types of learners. They felt empowered using BDI strategies to achieve instructional transformation. A sixth-grade science teacher emphasized:

Since I've gone through the [federally funded project], it occurred to me that every person who is an educator, every person who is involved with working with children and helping them to develop ideas and understanding regardless of the content, I think it's so essential that they should have the training that we had simply because it helps teach you to do very simple things, things that you know, are so easily incorporated into every lesson and just ensures that every student, regardless of where they are from or if they have a learning disability, it just ensures that they are more capable of understanding, participating and comprehending.



For this participant, BDI was a highly applicable and effective approach for all students, including CLD learners. Her words expressed the desire for every educator to receive BDI professional development so that all teachers and students could benefit. With increased outcomes in student participation, comprehension, and understanding, BDI was viewed by participants as a means to achieve increased equity, inclusivity, and effectiveness in diverse middle school classrooms.

The simplicity of BDI also stood out among participants as a compelling reason for its continued use. A sixth-grade teacher discussed this characteristic of BDI implementation in relation to teacher commitment to students. She proposed:

Building community happens when you raise the rigor, make the relevance, and it's your heart. It is not a program. It is right here. It is pausing, it is listening, it is hearing, it is responding. It is not anything else. It's so simple...it's about just showing that you actually care. It's not something that's scripted... it's a commitment and I have always been committed to my kids.

BDI encourages teachers to see, care about, and be responsive to the whole learner (Herrera, 2022). Culturally responsive/sustaining pedagogy is not simply about the lesson taught. Rather, it is about creating a culture of trust and a sense of belonging that nurtures growth, development, and learning as well as the human spirit. As evidenced in the words of this participant, teaching with BDI reflects a commitment to all members of the classroom community. It involves pausing, listening, hearing, and responding—and, most importantly, it is about the heart.

CONCLUSIONS AND IMPLICATIONS

This study answered calls in the field for research and guidance on applying CRT and CSP in middle school CLD classrooms. By exploring 10 middle school teachers' perspectives on their implementation of BDI, the authors sought to elucidate how educators in diverse classrooms use students' biographies to bridge the gap between CLD learners and the curriculum and foster an equitable and inclusive learning environment. The research findings demonstrated the applicability and feasibility of BDI for promoting pedagogical transformation among the study participants, with multifaceted benefits for CLD learners' engagement, language development, and learning across content areas.

Several conclusions are noteworthy. First, teachers used BDI to learn more deeply about the four dimensions of students' biographies (i.e., sociocultural, cognitive, linguistic, and academic). As perceived by the participating educators, it is necessary to actually *know*

students before educators can *teach* them. For example, participants mentioned that some CLD learners came from a unique culture and spoke a different language at home. To make those CLD learners feel comfortable and valued in the classroom, teachers encouraged them to share their home culture with the entire class and teach their peers the unique language they speak at home. Other peers were curious about the different cultures and languages, so they wanted to learn from their peer experts. Thus, positive peer-to-peer relationships were strengthened. Teachers also designed culture celebration activities and invited students and their families to the classroom to share their culture within the larger community. In addition, students' biographies reflect what matters most to learners. Providing students with opportunities to share their connections to background knowledge, including skills and experiences gained through their families and communities, allowed students to bring their cultures and languages to the table.

With a fuller understanding of students' assets, teachers were able to approach learning in more relevant and culturally responsive/sustaining ways, bridging students' lives to the curriculum. Student voices matter. According to participants, when students feel heard, seen, respected, cared for, and loved, they feel a greater sense of safety and belonging, become more willing to give and receive support from their community of peers, are more likely to share and demonstrate what they know and are capable of doing, and take greater ownership of their learning.

With a deeper understanding of students' individual assets and needs, teachers were better prepared to support learners to achieve the lesson's learning goals. Teachers perceived that BDI supported them to be more intentional about meeting students where they were, and it enabled them to facilitate learners' engagement with the curriculum more effectively. Knowing students' biographies allowed teachers to scaffold tasks and teach new concepts in more comprehensible ways. Through BDI, teachers enriched the curriculum by maximizing the diverse perspectives that CLD learners brought to the topics. Adjusting their instructional practices required participants to reflect on their beliefs, their approaches to teaching and learning, and their interactions with CLD families. It also frequently involved collaboration with colleagues. BDI was perceived to be suitable and sustainable for all types of learners (e.g., grade-level, CLD, ELL, SPED). Teachers found that simple actions demonstrating that they care about learners and are willing to listen, understand, and respond are the foundation for transforming middle school classrooms into accessible, inclusive, and effective learning spaces for all.

This study has theoretical and practical implications for the field. At the theoretical level, the findings align with and expand upon the findings of prior research (e.g., Holmes et al., 2018; MacDonald et al., 2013; Murry et al., 2021) demonstrating the multifaceted benefits of BDI for teachers and students. This study reinforces previous findings (e.g., Holmes, 2023) that teachers of diverse racial/ethnic backgrounds, including Caucasian teachers, can use BDI effectively to implement the principles of culturally responsive/sustaining pedagogy and support the learning of CLD students. This study extends the discussion by focusing solely on the use of BDI in diverse middle school classrooms. It also provides evidence for the utility of BDI to support all learners, including those with exceptionalities.

At a practical level, this research further affirms the use of BDI to promote educational transformation. The findings demonstrate that teachers perceived the coursework and PD associated with the federally funded project to be instrumental to their increased levels of responsiveness to the assets and needs of CLD learners. Despite overwhelming evidence that teachers perceived they approached instruction with enhanced perspectives and capacities for CRT/CSP in classroom practice, there also were indications that teachers were still on a journey toward increased awareness and critical consciousness surrounding equitable instruction for CLD students. For example, some teachers still referred to CLD learners as "ESL kids," which is more of a deficit-oriented descriptor. BDI professional development, by contrast, utilizes "CLD learners" as the preferred term. Developing more asset-oriented lenses and practices is an ongoing process, and switching to a term like CLD learners is one way to create more inclusive and equitable learning environments.

Given the overall results of this study, BDI holds promise for use in teacher preparation programs and further professional development opportunities for middle school in-service teachers across content areas. Educators can guide teachers to engage in pedagogical reflexivity to embrace multilingual ideologies, promote "bilanguaging love" for living and being between identities, languages and cultures, and enhance "caring" for social-emotional growth (Noddings, 1984; Pacheco & Hamilton, 2020). Holding a multilingual perspective towards CLD learners provides room and possibility for enacting "bilanguaging love" and "caring" in the classroom. Through exploring CLD learners' biographies and maximizing their translingual, transcultural, and transnational experiences, teachers will most likely be able to make transforming the structural inequalities in schools or even in the larger communities a reality. The research findings further serve as a reference for educators seeking to increase the responsiveness and relevance of their instruction, amplify the voices



and representation of CLD students in the curriculum, and create more equitable and inclusive learning spaces.

Additional research is needed to explore the use of BDI across a greater range of content areas, expanding the focus from core courses (e.g., ELA, math, science, social studies) to include elective courses (e.g., world languages, family and consumer sciences, fine arts). Further research is also warranted to investigate the specific aspects of professional development that teachers find most useful to their ability to maximize BDI to advance CLD students' learning. Expanding the types of educators involved in the research (e.g., instructional coaches, paraprofessionals) would add additional perspectives and nuance to the conversation. Longitudinal research investigating the long-term linguistic and academic outcomes of BDI for CLD learners would significantly contribute to the field.

ACKNOWLEDGEMENTS

This research was funded in part by a National Professional Development project of the US Department of Education, Office of English Language Acquisition.

THE AUTHORS

Jinhua Wang is an instructor at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education at Kansas State University. She is certified in PreK-12 ESOL. Dr. Wang has 6 years of EFL teaching experience in China and 11 years of world language (Mandarin Chinese) teaching and ESL teaching experience at secondary levels in the US. Her major research interests include bilingual/multilingual education, teacher education, ESL/EFL studies, and qualitative research methodologies.

Socorro G. Herrera is a professor in the Department of Curriculum and Instruction, College of Education at Kansas State University and serves as Executive Director of the Center for Intercultural and Multilingual Advocacy (CIMA). She is certified in elementary education, bilingual education, and school counseling. As an international keynote speaker, district consultant, and trainer of trainers, she has collaborated with teachers across the country and the world to chart new paths to academic success for culturally and linguistically diverse learners. Her research focuses on the role that personal histories of the learner, family, and teacher play in literacy development and culturally responsive, sustaining pedagogy; reading strategies; and teacher preparation for diverse classrooms. Dr. Herrera has authored twelve textbooks and numerous articles in journals such as *Bilingual Research*



Journal, Journal of Hispanic Higher Education, Journal of Curriculum and Instruction, International Journal of Multicultural Education, Teacher Education Quarterly, and Urban Education.

Melissa A. Holmes © is associate director at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education at Kansas State University. Her teaching, research, and professional development efforts with K-12 educators emphasize capacity building for culturally responsive and sustaining teaching, literacy and language development, and applications of biography-driven instruction in U.S. and international K-12 settings. Dr. Holmes has co-authored Crossing the Vocabulary Bridge: Differentiated Strategies in Diverse Secondary Classrooms (2011) and Equitable and Inclusive Teaching for Diverse Learners with Disabilities: A Biography-Driven Approach (2023). She also has authored numerous book chapters and articles in journals such as American Secondary Education, Forum for International Research in Education, Journal of Bilingual Educational Research and Instruction, Journal of Curriculum and Instruction, Journal of Multicultural Education, Linguistics and Education, Multicultural Learning and Teaching, Teaching Education, and Teaching Education Quarterly.

Kendra Herrera © is a doctoral candidate, a project manager at the Center for Intercultural and Multilingual Advocacy (CIMA) in the College of Education at Kansas State University. Her teaching, research, and professional development efforts with K-12 educators emphasize shifting deficit perspectives among teachers who specifically serve culturally and linguistically diverse students, teacher education, and ESL studies. She has served teachers and students for over 20 years in culturally and linguistically diverse elementary, middle, and high school campuses as an administrator, instructional coach, and classroom teacher.

REFERENCES

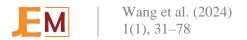
- Aghasafari, S., Bivins, K., & Nordgren, B. (2021). Arts integration and culturally sustaining pedagogy: Supporting bi/multilingual high school learners in biology. *Journal of Interdisciplinary Studies in Education*, 10(1), 59–81. https://www.ojed.org/index.php/jise/article/view/3172
- Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education. *Review of Educational Research*, 86(1), 163–206. https://doi.org/10.3102/0034654 315582066
- Barnes, T. N., & McCallops, K. (2019). Perceptions of culturally responsive pedagogy in teaching sel. *Journal for Multicultural Education*, *13*(1), 70–81. https://doi.org/10.1108/jme-07-2017-0044

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp0630a
- Carbonneau, K. J., Ardasheva, Y., Lightner, L., Newcomer, S. N., Ernst-Slavit, G., Morrison, J. A., & Morrison, S. J. (2022). Moving beyond the classroom: Pre- and in-service teachers' self-efficacy for working with culturally and linguistically diverse students. *Teaching Education*, 34(3), 247–264. https://doi.org/10.1080/10476210.2022.2104832
- Carrejo, D. J., & Reinhartz, J. (2014). Facilitating conceptual change through modeling in the Middle School Science Classroom. *Middle School Journal*, 46(2), 10–19. https://doi.org/10.1080/00940771.2014.11461905
- Cavallaro, C. J., & Sembiante, S. F. (2021). Facilitating culturally sustaining, functional literacy practices in a middle school ESOL reading program: A design-based research study. *Language and Education*, *35*(2), 160–179. https://doi.org/10.1080/09500782.2020.1775244
- Cazden, C. B., & Leggett, E. L. (1976). *Culturally responsive education: A response to LAU Remedies II*. U.S. Department of Health, Education & Welfare, National Institute of Education.
- Coady, M. R., Harper, C., & de Jong, E. J. (2016). Aiming for equity: Preparing mainstream teachers for inclusion or inclusive classrooms? *TESOL Quarterly*, 50(2), 340–368. https://doi.org/10.1002/tesq.223
- Coppola, R., Woodard, R., & Vaughan, A. (2019). And the students shall lead us: Putting culturally sustaining pedagogy in conversation with Universal Design for learning in a middle-school spoken word poetry unit. *Literacy Research: Theory, Method, and Practice*, 68(1), 226–249. https://doi.org/10.1177/2381336919870219
- Cronenberg, S., Tews, N., Price, D., & Bishop, N. (2023). Culturally responsive instrumental music instruction: Efforts by middle level music educators to connect their ensemble programs to the local community. *Contributions to Music Education*, 47(2023), 165–191.
- Darling-Aduana, J., Good, A., & Geraghty, E. (2020). The culture of power online: Cultural responsiveness and relevance in vendor-developed online courses. *Urban Education*, 57(4), 714–742. https://doi.org/10.1177/0042085920972169
- Davila, L. T., & Linares, R. E. (2020). English as a second language teachers' perceptions of care in an anti-immigrant climate. *International Multilingual Research Journal*, 14 (4), 355–369. https://doi.org/10.1080/19313152.2020.1747164
- Dwomoh, R., Osei-Tutu, A. A. Z., Chhikara, A., Zhou, L., Oudghiri, S., & Bell, T. (2023). Critical understanding of English learners: Experience and practice of educators in a professional development course. *TESOL Quarterly*, 57(4), 1401–1433. https://doi.org/10.1002/tesq.3200
- Early, J. S. (2019). A case for teaching biography-driven writing in ELA classrooms. *English Journal*, 108(3), 89–94. https://doi.org/10.58680/ej201929974
- Engel, G. L. (1978). The need for a new medical model: A challenge for biomedicine. G. U. Balis, L. Wurmser, & E. McDaniel (Eds.), *Dimensions of behavior: The psychiatric foundations of medicine* (pp. 3–21). Butterworth Publishers. https://doi.org/10.1016/B978-0-409-95009-0.50006-1

- Galloway, M. K., Callin, P., James, S., Vimegnon, H., & McCall, L. (2019). Culturally responsive, antiracist, or anti-oppressive? How language matters for school change efforts. *Equity & Excellence in Education*, 52(4), 485–501. https://doi.org/10.1080/10665684.2019.1691959
- García, A., & O'Donnell-Allen, C. (2015). Pose, wobble, flow: A culturally proactive approach to literacy instruction. Teachers College Press.
- Gates, M. L., & Hutchinson, K. (2005). Cultural competence education and the need to reject cultural neutrality: The importance of what we teach and do not teach about culture. Paper presented at the College of Education, Criminal Justice, and Human Services (CECH) Spring Research Conference, University of Cincinnati, OH.
- Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). Teachers College Press.
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.
- Grant, L. T., Yoo, M. S., Fetman, L., & Garza, V. (2021). In-service teachers' perceptions of their preparation to work with learners of English. *Educational Research: Theory and Practice*, 32(1), 62–71.
- Heineke, A. J., Vera, E. M., Guo, W., Kaye, J., & Elliott, J. (2023). Considering the social-emotional well-being of multilingual learners. *The Elementary School Journal*, 123(4), 599–624. https://doi.org/10.1086/723028
- Herrera, S. (2010). *Biography-driven culturally responsive teaching* (1st ed.). Teachers College Press.
- Herrera, S. (2016). *Biography-driven culturally responsive teaching* (2nd ed.). Teachers College Press.
- Herrera, S. (2022). *Biography-driven culturally responsive teaching: Honoring race, ethnicity, and personal history* (3rd ed.). Teachers College Press.
- Herrera, S. G., & Murry, K. G. (2016). *Mastering ESL/EFL methods: Differentiated instruction for culturally and linguistically diverse (CLD) students*. Pearson.
- Herrera, S. G., Cabral, R. M., & Murry, K. G. (2020). Assessment of culturally and linguistically diverse students (3rd ed.). Pearson.
- Herrera, S. G., Kavimandan, S. K., & Holmes, M. A. (2011). Crossing the vocabulary bridge: Differentiated strategies for diverse secondary classrooms. Teachers College Press.
- Herrera, S. G., Kavimandan, S. K., Perez, D. R., & Wessels, S. (2017). Accelerating literacy for diverse learners: Classroom strategies that integrate social/emotional engagement and academic achievement, K-8 (2nd ed.). Teachers College Press.
- Herrera, S. G., Rodríguez, D., Cabral, R. M., & Holmes, M. A. (2023). *Equitable and inclusive teaching for diverse learners with disabilities: A biography-driven approach*. Teachers College Press.
- Holmes, M. A. (2022). Creating equitable spaces for all learners: Leveraging community expertise through situationally responsive instructional conversations (Publication No. 29161555) [Doctoral dissertation, Kansas State University]. ProQuest Dissertations and Theses Global Database.

- Holmes, M. A., Kavimandan, S. K., & Herrera, S. G. (2018). Reaching rigor for English learners through responsive interactions of care. In N. Guler (Ed.), *Optimizing elementary education for English language learners* (pp. 91–115). IGI Global.
- Hopkins, M., & Schutz, K. M. (2019). Bilingual teacher leadership: Supporting linguistically responsive practices and parent engagement in schools. *NABE Journal of Research and Practice*, 9(2), 96–109. https://doi.org/10.1080/26390043.2019.1589297
- Howard, T. C. (2010). Why race and culture matter in schools: Closing the achievement gap in America's classrooms. Teachers College Press.
- Irvine, J. J. (1990). Transforming teaching for the twenty-first century. *Educational Horizons*, 69(1), 16–21. http://www.jstor.org/stable/42924855
- Irvine, J. J. (1992). Making teacher education culturally responsive. In M. E. Dilworth (Ed.), *Diversity in teacher education: New expectations* (pp. 79–92). Jossey-Bass.
- Irwin, V., Zhang, J., Wang, X., Hein, S., Wang, K., Roberts, A., York, C., Barmer, A., Mann, F. B., Dilig, R., & Parker, S. (2021). *Report on the condition of education 2021* (NCES 2021-144). U.S. Department of Education, National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021144
- Jackson, I., Gonzales, M. M., & Mensah, A. (2022). It is not equitable if it is not culturally sustaining: Teaching and learning in 1:1 laptop schools. *Journal for Multicultural Education*, 16(4), 323–336. https://doi.org/10.1108/jme-09-2021-0180
- Khalifa, M. A., Gooden, M. A., & Davis, J. E. (2016). Culturally responsive school leadership. *Review of Educational Research*, 86(4), 1272–1311. https://doi.org/10.3102/0034654316630383
- Kim, J. B., Cuenca, A., & Chen, A. Y.-P. (2019). Visual biography and citizenship: Biography driven instruction in the social studies classroom. In L. C. de Oliveira, K. M. Obenchain, R. H. Kenney, & A. W. Oliveira (Eds.), *Teaching the content areas to English language learners in secondary schools* (pp. 297–309). Springer. https://doi.org/10.1007/978-3-030-02245-7_19
- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 257–270). Sage.
- Kotluk, N., & Aydin, H. (2021). Culturally relevant/sustaining pedagogy in a diverse urban classroom: Challenges of pedagogy for Syrian refugee youths and teachers in Turkey. *British Educational Research Journal*, 47(4), 900–921. https://doi.org/10.1002/berj.3700
- Ladson-Billings, G. (1995). But that's just good teaching! The case for culturally relevant pedagogy. *Theory Into Practice*, 34(3), 159–165. https://doi.org/10.1080/004058495 09543675
- Ladson-Billings, G. (2017). The (r)evolution will not be standardized: Teacher education, hip hop pedagogy, and culturally relevant pedagogy 2.0. In D. Paris & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 141–156). Teachers College Press.
- Larson, K. E., Pas, E. T., Bradshaw, C. P., Rosenberg, M. S., & Day-Vines, N. L. (2018). Examining how proactive management and culturally responsive teaching relate to student behavior: Implications for measurement and practice. *School Psychology Review*, 48(2), 153-166. https://doi.org/10.17105/SPR-2017-0070.V47-2

- Lau, W. S., & Shea, M. (2022). Empowering English learners in the classroom through culturally responsive social-emotional teaching practices. *Journal of Multilingual and Multicultural Development*. Advance online publication. https://doi.org/10.1080/01434632.2022.2078337
- Li, G. (2018). Moving toward a diversity plus teacher education: Approaches, challenges, and possibilities in preparing teachers for English language learners. In *Innovative practices* in teacher preparation and graduate-level teacher education programs (pp. 1–22). IGI Global.
- Lu, X., & Troyan, F. J. (2022). Diversity and inclusion of culturally and linguistically diverse students in K-12 Chinese language education. *Foreign Language Annals*, *55*(3), 684–703. https://doi.org/10.1111/flan.12639
- Lucas, T., Villegas, A. M., & Freedson-Gonzalez, M. (2008). Linguistically responsive teacher education. *Journal of Teacher Education*, 59(4), 361–373. https://doi.org/10.1177/0022487108322110
- Lyon, E. G. (2022). Reframing formative assessment for emergent bilinguals: Linguistically responsive assessing in science classrooms. *Science Education*, *107*(1), 203–233. https://doi.org/10.1002/sce.21760
- MacDonald, G. L., Miller, S. S., Murry, K., Herrera, S., & Spears, J. D. (2013). Efficacy of ACA strategies in biography-driven science teaching: An investigation. *Cultural Studies of Science Education*, 8(4), 889–903. https://doi.org/10.1007/s11422-013-9517-4
- Mason, H. (2022, September 26). *The nation needs more bilingual, dual language teachers*. The Century Foundation. https://tcf.org/content/commentary/the-nation-needs-more-bilingual-dual-language-teachers/
- McGlynn, K., & Kelly, J. (2018). Science for all: Creating a culturally responsive middle school science classroom. *Science Scope*, 42(2), 16–21. https://doi.org/10.2505/4/ss18_042_02_16
- Mellom, P., Straubhaar, R., Balderas, C., Ariail, M., & Portes, P. (2018). "They come with nothing:" How professional development in a culturally responsive pedagogy shapes teacher attitudes towards Latino/a English language learners. *Teaching and Teacher Education*, 71, 98–107. https://doi.org/10.1016/j.tate.2017.12.013
- Milner, H. R. (2016). A Black male teacher's culturally responsive practices. *The Journal of Negro Education*, 85(4), 417–432. https://doi.org/10.7709/jnegroeducation.85.4.0417
- Mun, R. U., Langley, S. D., Ware, S., Gubbins, E. J., Siegle, D., Callahan, C. M., McCoach, D. B., & Hamilton, R. (2016). *Effective practices for identifying and serving English language learners in gifted education: A systematic review of the literature*. University of Connecticut, National Center for Research on Gifted Education.
- Murry, K. G., Holmes, M., & Kavimandan, S. (2020). Approximating cultural responsiveness: teacher readiness for accommodative, biography-driven instruction. *FIRE: Forum for International Research in Education*, 6(2), 103–124.
- Murry, K., Kavimandan, S., Herrera, S. G., & Holmes, M. (2021). Phenomenological research on biography-driven instruction use in highly diverse classrooms. *Teacher Education Quarterly*, 48(2), 7–23.



- National Center for Education Statistics [NCES]. (2023). English Language Learners in Public schools. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/cgf
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. University of California Press.
- Osei-Tutu, A. Z., Dwomoh, R., Chhikara, A., Zhou, L., Oudghiri, S., & Bell, T. (2022). Diversity, equity, and inclusivity in a time of crises: A reflection on educators' perspectives of critical theory and social justice issues. In K. A. Lewis, K. Banda, M. Briseno, & E. J. Weber (Eds.), *The kaleidoscope of lived curricula: learning through a confluence of crises* (13th ed., pp. 367–382). Information Age Publishing.
- Pacheco, M., & Hamilton, C. (2020). Bilanguaging love: Latina/o/x bilingual students' subjectivities and sensitivities in dual language immersion contexts. *TESOL Quarterly*, 54(3), 548–571. https://doi.org/10.1002/tesq.585
- Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher*, 41(3), 93–97. https://doi.org/10.3102/0013189X12441244
- Paris, D., & Alim, H. S. (2014). What are we seeking to sustain through culturally sustaining pedagogy? A loving critique forward. *Harvard Educational Review*, 84(1), 85–100. https://doi.org/10.17763/haer.84.1.9821873k2ht16m77
- Paris, D., & Alim, H. S. (2017). Culturally sustaining pedagogies: Teaching and learning for justice in a changing world. Teachers College Press.
- Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Sage.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice. Sage.
- Ponzio, C. M. (2020). (Re)imagining a translingual self: Shifting one monolingual teacher candidate's language lens. *Linguistics and Education*, 60, Article 100866. https://doi.org/10.1016/j.linged.2020.100866
- Puzio, K., Newcomer, S., Pratt, K., McNeely, K., Jacobs, M., & Hooker, S. (2017). Creative failures in culturally sustaining pedagogy. *Language Arts*, 94(4), 223–233. https://doi.org/10.58680/la201728949
- Robins, J. H., Sanguras, L. Y., & Carpenter, A. Y. (2023). Development of an online, culturally responsive, accelerated language arts curriculum for middle school students. *Gifted Child Today*, 46(3), 168–179. https://doi.org/10.1177/10762175231168445
- Rom, N., & Eyal, O. (2019). Sensemaking, sense-breaking, sense-giving, and sensetaking: How educators construct meaning in complex policy environments. *Teaching and Teacher Education*, 78, 62–74. https://doi.org/10.1016/j.tate.2018.11.008
- Saldaña, J. (2013). The coding manual for qualitative researchers (2nd ed.). Sage.
- Samuels, A. J. (2018). Exploring culturally responsive pedagogy: Teachers' perspectives on fostering equitable and inclusive classrooms. *SRATE Journal*, 27(1), 22–30. https://www.srate.org/JournalEditions/Volume27-1/Samuels_Manuscript.pdf
- Santibañez, L., & Gándara, P. (2018). *Teachers of English language learners in secondary schools: Gaps in preparation and support*. UCLA/The Civil Rights Project.

- Smith, P. (2020). "Mr. Wang doesn't really care how we speak!": Responsiveness in the practice of an exemplary Asian-American teacher. *The Urban Review*, 52, 351–375. https://doi.org/10.1007/s11256-019-00531-4
- Soodmand Afshar, H., & Yousefi, M. (2019). Do EFL teachers 'critically' engage in cultural awareness? A mixed-method investigation. *Journal of Intercultural Communication Research*, 48(4), 315–340. https://doi.org/10.1080/17475759.2019.1629331
- Store, J. C. (2023). Enacting inclusive mathematics teaching and learning using biography-driven instruction. *Journal of Educational Research and Practice*, *13*(1), 153–162. https://doi.org/10.5590/JERAP.2023.13.1.12
- Stringer, E. T. (2014). Action research (4th ed.). Sage.
- Tigert, J. M., & Leider, C. M. (2022). Beyond the "Core": Preparing art educators to meet the needs of culturally and linguistically diverse students. *TESOL Quarterly*, 56(1), 425–434. https://doi.org/10.1002/tesq.3040
- Van Manen, M. (1990). Researching lived experience. SUNY Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.
- Woodley, X., Hernandez, C., Parra, J., & Negash, B. (2017). Celebrating difference: Best practices in culturally responsive teaching online. *TechTrends*, *61*(5), 470–478. https://doi.org/10.1007/s11528-017-0207-z
- Yin, R. K. (2009). Case study research: Design and methods. Sage.
- Yoon, B. (2023). Research synthesis on culturally and linguistically responsive teaching for multilingual learners. *Education Sciences*, *13*(6), Article 557. https://doi.org/10.3390/educsci13060557
- Yoon, B., & Pratt, K. L. (2023). Primary language impact on second language and literacy learning: Linguistically responsive strategies for classroom teachers. Lexington Books.

APPENDIX A

Highlighted BDI Strategies

Extension Wheel



ACTIVATION: A Canvas of Opportunity

Directions:

- Have students write the idea/topic in the center circle of the wheel.
- Ask students to think individually about three extensions/effects of the idea in the center circle. For example, you can explain that any idea can have negative as well as positive effects. Encourage students to think through their cultural and linguistic lens as they consider the term. For instance, if the term in the middle is Government, students might think of extensions such as democracy, monarchy, and militarism (depending
- upon the students' funds of knowledge, prior knowledge, and background knowledge, especially knowledge related to their countries of origin).
- Once the students have individually thought about the ideas, group them into pairs or small groups to have them do a turn-and-talk to discuss their ideas with each other.
- As students share the rationale behind their extensions with each other, walk around the classroom and silently listen as they discuss their thought processes.



CONNECTION: The Broad & Narrow Strokes of Learning

Directions:

- Once students have finished discussing their initial extensions of the central topic, or after you have covered some of the content of the lesson, have students meet in their pairs/small groups to choose three extensions from their oral discussions (potentially keeping in mind new information from the lesson) to transfer onto the first ring of the wheel.
 - Revoicing can play a crucial role at this time, so you also may want to bring the class together to revoice some of the things that students put on their wheels.
 For example, a teacher might say, "Huma put the term ______ on the first ring. I really like that because it truly supports the topic."
- After students have finished writing the ideas on the first ring, ask them to expand further on those ideas. This time the groups will write on the second (outer) ring, adding two extensions/ideas per one extension from the first ring. (Again, you can select an appropriate point in the lesson for students to do this expansion step.)
- After students have recorded the extended ideas on the second ring, bring the class together and have them share their ideas with the whole group or with another small group.
- As students share with the class, allow them to add additional notes onto their own Extension Wheels, based on the ideas they are hearing.



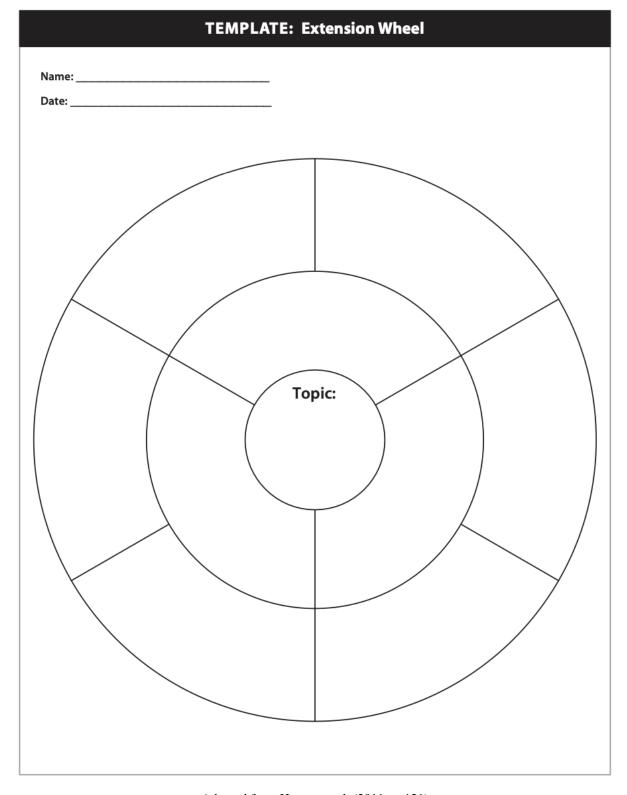
AFFIRMATION: A Gallery of Understanding

Directions:

- As a way of helping students self-assess (and helping you, the teacher, to do a summative assessment) how much has been learned about the topic, you can have students expand to an additional third ring.
 - To do this, have students only expand upon certain ideas from the second ring.
 - Go around the room and circle on the groups' Extension Wheels the ideas you want them to extend. Make sure to have them expand upon the things that will help them move toward the desired outcome of the lesson or toward the ideas that you want your students to take away.
- After groups finish recording their ideas, ask students to write a narrative or expository summary of the points identified on the wheel. Students can complete this task individually or in pairs.
- You can incorporate student choice into this assessment by allowing students to choose which of the ideas from the wheel they would like to discuss in their writing.
- You can accommodate student preferences and various levels of language proficiency by allowing students to alternatively create a pictorial summary that incorporates key terms and ideas.

Adopted from Herrera et al. (2011, pp. 116–118)





Adopted from Herrera et al. (2011, p. 121)

71

DOTS Chart

DOTS Strategy (Determine, Observe, Talk, Summarize) Overview The DOTS strategy provides a window that allows students, through pictures and words, to make public their immediate connections with a topic. Used throughout the lesson, DOTS helps students link new learning to build on existing knowledge. For additional details on how to implement the DOTS strategy, please refer to Chapter 8. Phase Directions **Benefits to CLD Students** Activation · Give students a blank DOTS Chart at the beginning of the • Empowers students to tap into (Opening) their background knowledge Have students place the name of the topic/concept that and bring information they **Determine** will be taught at the top of the chart. can share. what I know · Start by asking students to write things they know about • Can be applied to any content the topic/story, putting each word, term, or phrase in the • Creates a context for students box of the letter with which it starts. · Students can be encouraged to write in their native lanto publicly share connections guages or to draw to show their understanding. they make to the lesson topic. • Allow only 3-5 minutes for students to write/draw. · Students should be able to explain why they added individual words to the chart. • Have students write the target vocabulary around the Connection • Scaffolds students' learning to (Work Time) outside of the chart as the words are introduced during support their making sense the lesson or before getting into the text, lecture, or and bringing meaning to text, Observe PowerPoint. teacher talk, and peer and make · Have students make associations with the words inside conversation. connections their charts with those outside the chart to demonstrate · Gives students a personal to what I am connections to the vocabulary words and extend learning. scaffold to use throughout the learning from Students can demonstrate associations physically by teacher/text drawing lines between the words that they connect. · Supports the learner in build- Have students share their associations with a partner or ing both social language and Talk to peers small group, because such discussion helps to solidify academic language. connections. • Students can add words that come up during the lesson, as well as words from text used for a reading. Affirmation Ask students to use their chart to do the following types of • Provides students with a tool (Closing) tasks depending on their language proficiency: in their hands for writing. Use the chart as a tool to write definitions. problem solving, creating, Summarize Use the vocabulary to complete a fill-in-the-blank/cloze clarifying, or elaborating on what I have what has been learned. exercise. learned Use the vocabulary to write a paragraph. • The teacher can create a checklist or a rubric to assess

Adopted from Herrera et al. (2022, p. 185)

students' understanding of the vocabulary words or the

paragraphs they created.

DOTS Chart (Determine, Observe, Talk, Summarize)

Topic:			

А-В	C-D	E-F
G-H	I–J	K-L
M-N	O-P	Q-R
S-T	U-V-W	X-Y-Z

Adopted from Herrera et al. (2022, p. 15)

Linking Language



ACTIVATION: A Canvas of Opportunity

Directions:

- Select three or four pictures that illustrate key concepts from the lesson. Pictures can be taken from the Internet, clipart, or magazines, or pictures from the textbook can be used.
- Tape each picture on the center of a large piece of chart paper (if using the textbook, place the textbook in the center of the chart paper).
- Place the students in groups of four or five students.
- Instruct the students to write or draw everything they think of or feel when they look at the picture. Encourage students to use the language of their choice.
- Allow only 1–2 minutes for students in each group to write
- Then have all groups rotate to the next chart/picture.
- Continue until all groups have been to each picture.
- As students are writing or drawing their ideas, rotate around the room and circle any words that come close to the target vocabulary or actually reflect the academic vocabulary for the day.
- At this time, you can work as a silent observer to reflect upon the knowledge that students bring to the learning community.



CONNECTIONS: The Broad & Narrow Strokes of Learning

Directions:

- Once all groups have returned to their original charts, have them review all the information that was placed on the chart. Ask students to identify common ideas/vocabulary by circling them or connecting them with a line.
 - Explain to the students that they have to look for any connecting words, including synonyms, found on the paper.
 - Depending upon the language levels of students, you can also ask them to find the antonyms as well.
- Next, share with the students the academic vocabulary words for the day and have them look for associations between the words on the posters and the academic vocabulary of the topic.
- As students share the associations from the posters, have them add the actual academic vocabulary words of the lesson to the poster.

- After students have finished adding to the posters, have them predict what the reading/lesson is going to be about based on the pictures and words that are on the posters.
- As you proceed with the lesson and work with the textbook, allow the groups to confirm or disconfirm their predictions as the lesson unfolds.
- Make sure to refer to the posters throughout the lesson and provide students with opportunities to confirm/ disconfirm the recorded words in relation to the concepts covered, clarify their understandings of the vocabulary words, and add other words that they learn.
- (Optional) Have students write the vocabulary words in their notebooks and record key ideas that emerge in their group discussions and individual reading and reflection.



AFFIRMATION: A Gallery of Understanding

Directions:

- Once you have finished the Connections phase of the lesson, give student groups a few minutes to discuss their overall comprehension of the topic.
- Have students individually, or in pairs, use the words on the posters to create a rich description of the vocabulary words or content concepts.
 - Students can use the words on the posters to create sentences.
- Students can further organize their thinking by using the sentences to create paragraphs that illustrate a conceptual connection.
- The resulting student products can be used for review and assessment of the key concepts at the end of the lesson

Adopted from Herrera et al. (2011, pp. 15–18)

Vocabulary Quilt

Vocabulary Quilt

Overview

The Vocabulary Quilt lets students activate background knowledge about vocabulary they will need for new learning. By updating their quilts throughout the lesson, students will strengthen connections with newly acquired information.

strengthen connections with newly acquired information.				
Phase	Directions	Benefits to CLD Students		
Activation (Opening)	 Choose eight vocabulary words based on their relevance to the lesson. Create blank vocabulary quilts by folding a large sheet of paper horizontally and vertically to produce eight boxes. Divide students into groups of four or five and give each group a vocabulary quilt. Have students write each vocabulary word in a separate box on the quilt. Explain to students that each individual should quick-write (in English or their native language) and/or draw in the box for each vocabulary word whatever comes to mind when he or she reads the word. Give students 3–5 minutes to write something for each word. It may be helpful to have each student use a marker or pen of a different color. Provide students with the opportunity to discuss in their groups the rationales for the associations they made. 	Provides students with the opportunity to share based on their background knowledge. Incorporates both linguistic and nonlinguistic representations. Allows for use of the native language. Talk with peers allows for associations to be made.		
Connection (Work Time)	 Post the vocabulary quilts to make "interactive word walls" that students can continually revisit during the lesson. Give students sticky notes they can use to write down additional information about the key vocabulary words as they encounter them in class readings or in the text. Have students add to their quilts new information gleaned from class or small-group discussion. Working as a facilitator, refer to students' vocabulary quilts and revoice the connections between students' initial associations and added text-related knowledge. Confirm/disconfirm associations from preassessment. 	 The focus on key vocabulary allows learners to selectively attend to the targeted words in relation to the content/ standard. Revisiting the students' words/ images written during the opening of the lesson reminds students that what they know can often be associated with what they are learning. 		
Affirmation (Closing)	 Have students work together in small groups to define an assigned subset or all of the vocabulary words one last time. Have groups share with the class the definitions they generated. Have students individually or in pairs write a paragraph summarizing what was learned. For limited English speakers, the following adaptations can be made to the writing activity: Have students dictate the sentences to a teacher, paraprofessional, or peer who can write them. Allow students to write in their native language. Pair the students with more proficient peers who can help them write the paragraph in English. The teacher can create a checklist or a rubric to assess students' understanding of the definitions or the paragraphs they created. 	Allows students to demonstrate their integrated knowledge of the vocabulary and content. Allows accommodation for students who have limited ability to write English.		

Adopted from Herrera et al. (2022, p. 187)

TEMPLATE: Vocabulary Quilt Write a vocabulary word in the center of each box. Note: This template is merely a guide for creation of your own Vocabulary Quilt. It is best to create the quilt on a large scale to give students plenty of space to write.

Adopted from Herrera et al. (2011, p. 121)

APPENDIX B

Project INSIGHT Culminating Interview

Interview Protocol

Interviewing is more about listening, than asking "follow-up questions. Remember to ask follow-up questions that support the teacher in digging deeper into the impact BDI/Courses have had on them and their students.

Part 1: Questions for All Teachers

- Describe your classroom experience(s) in working with culturally and linguistically diverse students, prior to starting the Project INSIGHT courses. What challenges, if any, did you experience?
- Has participating in this Project changed your instructional approach? If so, how?
- As a classroom teacher, have you perceived internal or external barriers to new instructional approaches? Implementation of strategies or new ways of doing? If so, how were you able to overcome them?
- Our program emphasizes knowing the biography of the student. Does this represent a new approach? If so, describe the changes that this has had on your classroom practice.
- How have students responded to any changes you have made to your instructional practices? Have any of their responses surprised you? If so, in what way?

Part 2: Questions by Level

PreK and Elementary School

- Have you noticed any changes in students' perceptions of "self" as learners or participants in the classroom? Is there any example that stands out? (Note: Listen to the teacher's response, attending to names or examples you might ask about.)
- Have you noticed any changes in students' language and literacy development? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)
- Have you noticed any changes in students' creative and critical thinking skills? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)

Middle School

- Have you noticed any changes in students' comprehension and writing that would set them up for college and career readiness? Is there any example that stands out? (Note: Listen to the teacher's response, attending to names or examples you might ask about.)
- Have you noticed any changes in learners' ability to develop community with peers and explore their own identity? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)
- In what ways, if any, does this type of instruction (e.g., using BDI strategies, having tools in hand) support learners to develop agency for independent learning? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)



High School

- How would you describe your instructional delivery, as it relates to the human element? Have you noticed any changes in students' sociocultural/socioemotional well-being? Is there any example that stands out? (Note: Listen to the teacher's response, attending to names or examples you might ask about.)
- Have you noticed any changes in the rigor of thinking and language development that students are able to achieve? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)
- What evidence, if any, do you have that this type of instruction has impacted students' cognitive and academic development? Is there any example that stands out? (Note: Again, listen first to the teacher's response in order to follow up on names or examples.)

Part 3: Additional Questions

Snowball with additional questions related to video selections from the lesson.